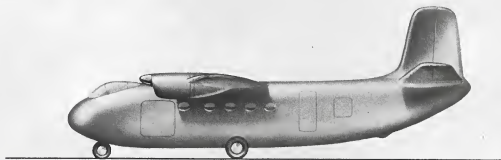


Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

JULY 10, 1944



Douglas Post-War Feeder Line Transport: Specifications have been released by Douglas Aircraft Co. for its post-war 24-passenger Skybus. Powered by two 700 hp. engines, the plane will have a flight range of 600 miles and a cruising speed of 190 mph. (Story on Page 7.)

Release Specifications on 24-Passenger Douglas Skybus

Transport plane, designed for post-war production, will have take-off gross weight of 17,300 pounds.....Page 7

More Pacific Advances Believed to Be Near

Commentator hints at Philippine landings by year-end; Kenney's new Far-Eastern air force ready for stiffer Jap resistance.....Page 23

Aircraft Yearbook Summarizes Phenomenal Progress

Cites aerodynamic refinements in planes, increased engine power and efficiency and propeller development.....Page 31

Lag in Airline Issues Traced to Post-War Prospects

Failure of stocks to keep pace with rest of list is believed realistic appraisal of problems to be faced on end of conflict.....Page 38

Allied Aviation Builds 3-Place Twin-Engine Amphibian

New craft, constructed almost entirely of plastic bonded plywood, is scheduled for test flights shortly.....Page 17

Six Months' Plane Output 51,960; Heavies Lead in June

Production last month shows decline of 9.5 percent, traceable partly to shorter work month, says Charles E. Wilson.....Page 11

A *Better* RELIEF VALVE For Aircraft Hydraulic Systems



A pilot-operated piston is used in the Vickers Aircraft Relief Valve instead of the customary spring-loaded direct acting mechanism. The result is smoother operation and greater accuracy throughout a wider range of pressure adjustment. Modulation in pressure from cranking point of valve to its maximum capacity is negligible (see curves below).

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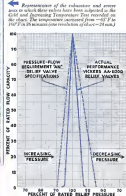
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As indicated by the curves above, the variation in pressure from cranking point to maximum rated capacity of the Vickers Balanced Piston Relief Valve is considerably less than permissible under AN Standards. Consequently, less pressure differential is required between relief valve setting and unloading valve pressure.

THE AVIATION NEWS

Washington Observer

RUSSIANS' TWIN-PURPOSE VISIT—Although the Russian aviation delegation is in the United States ostensibly for preliminary air conference talks, its members have spent much of their time outside Washington inspecting conventional airline operations throughout the country. They have shown intense interest in airports, maintenance, and radio, apparently gathering information which will be of value in reconstructing and improving civil aviation in the U.S.S.R. after the war. This is one reason the international air discussions in the Capitol have dragged along, and it now appears they will continue specifically for some time.

TRANS-POLAR ROUTE—Although the new Brookings Institution study by J. Packer Van Zandt on "The Geography of World Air Transport" says few, if any, major airways will go as far north as the Arctic Circle, it is known that the Russians are still giving serious thought to a trans-polar airline to be established after the war. The route under contemplation would operate almost bee-line from Moscow across the top of the world to the United States. Since the service would be subsidized, the economic factor involved in launching no important commercial route at this time is not at the moment a disturbing element in the Russians' informed officials in Washington say the Russians already have initiated impressive but unpublished air base projects in their wilderness areas.

WORLD POLICE FORCE—The 26th Air Force, with its very long range B-29 "Superfortresses," is the first practical military manifestation of our world police force that may be organized. Strong airborne bombardment and ground forces could reach any trouble spot in the world within 48 hours, the farthest point from any other point being about 12,346 miles,

Washington observers note. If it is true that national and international policy follows invention, very long range aircraft may well mark the beginning of important changes.

AIRPORT PLAN DELAYED—The Master Airport Plan of Civil Aeronautics Administration will be held up from three to six months as result of an amendment in the law resolution which called for submission of the plan to Congress. The CAA document will form the background for comprehensive federal airport legislation. It was virtually completed when Alaskan Delegate Diamond asked that territories and possessions of the U. S. be included. The study now will be extended and rewritten.

GLIDER CUTBACK—Unless revisions are made in top military circles, glider production will diminish throughout the rest of the year. Output of such troop carrying military transports reached a peak of some 500 a month early this year but it now appears likely that December will see deliveries of a tenth of that number. Army Air Forces officers recently disclosed to a House committee that the coming roughlands on the Pacific war would call for gliders—if they could be built—with longer ranges and greater cargo than is possible with the Waco design.

AIRCRAFT PRODUCTION OFF—The June output of aircraft which fell below schedule caused far more concern outside the industry than it did inside. Production generally is good and the armed services are getting the urgent types and airplane weight increased high. It was noted that the War Department reported airplane production was five percent below schedule, while the War Production Board said it was off 9.5 percent from the May output. The Army



Supply glider leads on partially-completed airfield in Normandy



A C-124C in flight. FIRST Airplane to land and take off from a flat-top. Photo Courtesy: Continental-Diamond Corp.

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Specifications on 24-Passenger Douglas Skybus Are Released

Transport plane, designed for post-war production, will have take-off gross weight of 17,500 pounds; range 600 miles with cruising speed of 190 miles an hour.

Douglas Aircraft Co., Santa Monica, has released engineering specifications for its post-war 24-passenger Skybus. Like the DC-3 in several appearance, it will carry cargo and passengers, operate with a take-off gross weight of 17,500 pounds, and have a flight range of 600 miles with cruising speed of 190 mph at 8,000 feet. It will be powered by two 700 hp engines. Selling price, \$80,300.

Other Firm's Plans—Reasons are current that other manufacturers on the West Coast have comparable designs on drafting boards, and a Pasadena manufacturer of auxiliary plane components soon will stage a preview of a proposed passenger and cargo feeder plane.

Douglas reaction to continued protest by airline operators against the difficulty of loading cargo in almost every current type of airliner has been the specification of truck-bed-level doors for the Skybus.

Prototype—While company officials emphasize that actual production of the new airplane must await governmental approval, which may not be given until the mid of the war, a prototype may be built soon under a War Production Board ruling that permits laboratory manufacture of prototype articles for post-war manufacture.

Study of the Skybus design reveals the apparent close attention of Douglas engineers to recommendations made to the company's domestic sales manager, Neil Paschall, last November by Karl de Blande, cargo traffic superintendent of American Airlines de Mexico, whom the latter conferred with factory heads on the ideal specifications for an airplane that might find buyers among Mexican airline operators. Douglas officials subsequently made a study of sales that

might be developed in Mexico. Following released specifications Nov. 18, 1943, the Skybus outlined by de Blande (AVIATION) appears to be well suited to moderate-distance hauls, short runway operations, and operation in and out of fields that might present obstructions hazardous to a low-wing design.

Buildings Movable—While the Skybus is designed for 24 passengers, the cargo compartment will be expandable through use of movable bulkheads, permitting flexible loading for the feeder operator, and for short haul operations of others.

The high-wing model is designed throughout to permit reduced ground handling both for cargo and passengers. In the passenger compartment, a rack located just inside the entrance door is provided for luggage, with overhead racks for lighter baggage. Pas-

senger seating does not have to be scheduled, Douglas engineers say, pointing out that the Skybus is so balanced that tail- or nose-heavy conditions will not result from uneven seating. The bulkhead between the passenger compartment and the cargo area can be shifted in five to ten minutes. —S. R.

Warplane Surplus Situation Eases

Fewer transports likely to be returned to civilian use from war areas than had been expected, observers believe.

The problem of surplus planes has eased considerably in the past month, and the consensus last week appeared to be that the overall picture will be much brighter than had generally been considered possible.

Several factors are developing that change the situation. One is that, repaid from combat areas inside the number of transport planes that might be considered usable in commercial operations will be much lower than anticipated. Rough usage is taking a wear and tear toll that automatically will eliminate many of the

Another Skybus

Douglas officials anticipate quick response to an established market and proposed feeder lines as a result of the company's announcement of the Skybus patterned and described in this issue of AVIATION NEWS. In any event, they are pinning even greater hope on an improved model which cannot be published until war conditions permit.

The revised Skybus will utilize an unconventional powerplant development which will require cruising speed and other performance and out certain operating costs markedly. The approved Skybus, under present plans, will utilize the same gear, fueling and landing gear as the version just announced but the power plants

will be placed in new positions. Already designed in six page-line version, for quick possible loading and unloading, fueling, and servicing at intermediate stops, the revised Skybus will make shorter stops to be of even shorter duration.

It is understood that both ships will be able to pass most CAA acceptance tests as commercial airline transports. With two versions, the company will be able to rush to completion the first or conventional type of some as the government reduces material. Later, when industry restrictions are eased, the advanced model can also be placed on the market.

planes, particularly under the terms of the new War Department ruling limiting return of planes requiring more than specified minimums of manhours to place in condition. This will tend to eliminate a large proportion of both combat and transport types insofar as the problem in this country is concerned.

May Stay Overseas—A second factor that is receiving a large amount of attention is the growing belief that many of the transport planes now in service in overseas theaters will necessarily be held in those theaters past their useful life for personnel and supplies transport needed in the rebuilding of damaged areas. The same sentiment is reflected in the reports from Europe, the more startling are the reports of rehabilitation needs.

An observer in this country views it as probable that planes in poor condition will be scrapped overseas and many of those remaining maintained for transportation needs in European countries, at least until railroads are rebuilt to a point where they can handle the demands of a peacetime country. The same will be true in the Far East.

Excess Financing Problem—A third factor is the operation of the War Production Board's P-43 order, which is making it possible for transport plane manufacturers to build prototypes of post-war planes. This will operate to reduce the time lag between war production and peacetime production and correspondingly cut the need of airlines for the surplus transports. While this is a nega-

No Fighters Sold

Although news reports last week implied that light, light, heavy and medium bombers had been turned over to the Defense Plant Corp. for sale to civilians, actually the only types available are several light single planes that had been converted for experimental purposes. It was learned from Frank Roman, DPC vice-president, who is heading the sale of surplus planes.

Combat type planes are not now being sold to civilians, Roman said. It is not expected that combat type planes will be sold to civilian purchasers because of the safety aspects. Some bombers would be convertible to cargo operations, but would be expensive to convert and operate, and would have to meet CAA standards.

One factor is the surplus field, it does tend to ease the serious problem of financing that was facing the Surplus War Property Administration and the airlines in the handling of the planes.

Another factor, which is more hopeful than actuality, but which is entirely possible, is that the Army has cooperated in the progressive return of planes to airlines at the same time it has been cutting off cargo contracts. If this same cooperation is given in the transport plane purchase, then it is possible that commercial transports can be built as production facilities become available in the plane plants, so that there will not be a period

in which the only planes available will be those that are declared surplus, obsolete or difficult to convert.

Reconversion Costs—Once surplus planes built for military cargo use are put on the market, the extra strength factors built into them and the lack of any provision for commercial facilities will skyrocket the cost factors of reconversion.

The Purple Surplus Aircraft Advisory Subcommittee report on surplus planes is reported to be virtually ready and probably will follow the general lines of the Harvard report, permitting airlines to acquire planes either on a lease basis or on a transmittable installment plan.

8,000 Available—Meanwhile, the Defense Plant Corp. bar has 9,000 planes available for sale to individuals and groups, of 11,450 turned over to it as surplus. Five thousand of the planes were those purchased by the DPC and leased to the War Training Service. Six thousand additional have been turned over by the Army as surplus, chiefly in the trainer category.

As it stands now, the planes are being sold on a basis of selling prices set by the Office of Price Administration and consenting of cost price less eight percent per year of service, at depreciation. Some 2,469 have been sold, returning 61 percent of cost price, and other blocks are going on the market through regional offices of the Civil Aeronautics Authority. Sales now are on the basis of individual bids—W. G. K.

Industry Man Named To Termination Body

R. D. Campbell assigned by Aeronautical Chamber to Wright Field to work with AAF on coordination of contract proceedings.

An important step toward cooperation between the aircraft industry and the government in meeting post-war problems has been taken with the assignment of a representative of the Aircraft Manufacturers Council of the Aeronautical Chamber to Materiel Command Headquarters. Wright Field, Dayton, to coordinate contract termination proceedings.

The decision to name a representative was made at a meeting in Dayton last week attended by representatives of Bendix, Consolidated Vultee, Curtiss-Wright, Douglas and Lockheed and John Lee, acting general manager of the Aeronautical Chamber. They met with officers of the Materiel Command at the instance of Maj. Gen. B. E. Meyers, acting commanding general of the Materiel Command. R. D. Campbell, of Curtiss-Wright, Buffalo, was named as the manufacturers' Dayton agent.

Starts This Week—Campbell, who takes over his duties this week, will cooperate with the new replacement division of the Materiel Command, which is headed by Col. Edwin V. Rawlings. The new division will set up machinery for handling contract terminations, cutbacks and disposal problems resulting from changes in AAF tactical requirements. The division already has termination work formerly performed by procurement and production divisions of the command. It will work to handle terminations and cutbacks so as to minimize dislocations in both management and labor.

The work which will be done by Campbell and others at Dayton



DIRECT AAF CONTRACT TERMINATIONS

Rapid changes in design and war-time needs make contract terminations a difficult task of the Army Air Forces Materiel Command. Officers are trained by the Procurement and Production Divisions of the command in necessary procedures at a contract termination school, Dayton Army Base, Vandenberg, Ohio. Pictured examining a chart during a recent inspection are, left to right: Lt. Col. H. B. Hapgood, assistant to Brig. Gen. F. M. Hapgood, Jr., chief of the Materiel Division, AAF Headquarters; Col. E. S. Philbrick, chief of the Termination Section, Procurement Division, Materiel Command; Col. W. M. Draper, chief of Contract Termination Branch, Headquarters Materiel Division, Army Service Forces; Gen. Hapgood; Maj. Gen. A. E. Jones, chief of the Procurement Division, AAF Headquarters; and Col. D. C. Scotland, chief of the Procurement Division, Materiel Command.

will be an extension of similar activity being carried out by the Chamber under direction of A. K. Doyle, of Lockheed, and Van Lee of Douglas.

Other Assignments Likely—This first step, the closest meet yet to an industry-government committee on this problem, is expected to be followed by the naming of several groups of industry experts to work on problems affecting specific fields. For example, it has been suggested that there might be separate committees for armaments, engine, propeller, and accessories or some similar classifications.

The Materiel Command is known to hope for establishment of short cuts in contract terminations and will work with the industry toward this end.

Subcontractors Affected—In this connection, hundreds of West Coast aircraft subcontractors who were caught unprepared by recent contract changes are planning to send their legal experts to AAF termination procedure schools in Los Angeles and San Francisco this week. Present, too, will be nearly 100 contract specialists at the major aircraft plants to receive detailed interpretation of the contract termination law signed by

Mr. Roosevelt two weeks ago. Confusion over termination procedures has become increasingly critical on the West Coast during the past 30 days because of major cutback orders and shifts in production, each affecting hundreds of subcontractors.

Montana Body OK's Model Aviation Bill

Montana's Aviation Committee, appointed by Gov. Sam C. Ford, has approved what is described as a "model" aviation conversion bill, although details are being withheld until legal difficulties of some sections are worked out.

Regulates Permits—William G. Ferguson, secretary of the committee, said the bill would give the commission power to regulate the issuance of permits of public convenience and necessity for interstate operation. The bill also provides for regulations for interstate air traffic and operation to be made and enforced by the commission.

No action was taken by the committee on license fees for airplane sales, pending further study of proposed federal legislation affecting this factor.



SOVIET FIGHTERS GUARD U. S. BASE:

Few photographs of Russian aircraft are seen in this country and most recent is one of Russian fighter planes, Yak 9's, which guard a United States bomber

base in the U.S.S.R., such as are being successfully used for shuttle bombing operations over German-occupied Europe.

Civil Air Attachés

The State Department is planning to appoint some of its embassy staffs by the addition of civil air attachés, who will act as advisors on civil aviation problems for ambassadors and ministers. While none has been assigned as yet, the move is in line with the growing interest of the government in international aviation.



GROUND SERVICE BY DOG SLED:

Air mail takes to dog sled at Kotik, Alaska. Huskies meet a Naval Air Transport Douglas R4D-1 to take the mail from the landing field to the base port office.

Form New Materials Coordination Body

NACA continues expected to prevent duplication of various programs.

Coordination in the materials research programs of the government, the aviation industry and aircraft materials producers will be undertaken by a new committee expanded through the National Advisory Committee for Aeronautics.

With the easing of production pressure, research in various materials has stepped up considerably, with the result that coordination of the various programs is expected to prevent much duplication and speed accomplishment of the program.

► Groundwork.—The Committee on Materials Research Coordination also will seek to lay the groundwork for a program for future development, cooperating with the new Post-War Research Committee for the Armed Services.

Initial organization of the committee is now under way, and membership now is composed of the NACA, Army Air Forces Materiel Bureau of Aeronautics and Coordinator of Research, Civil Aeronautics Administration, Office of Production Research and Development, War Production Board, the Office of Scientific Research and Development, and the National Research Council.

► Work of Committee.—As soon as the initial phases of the organization are completed, representatives of the aircraft industry, the Aircraft War Production Council

and other research units will be added.

The committee will compile, distribute and maintain a list of projects being investigated in the aircraft field, and with related projects in related fields being conducted through the various coordinated research programs. It will receive information for investigation of specific problems and recommend suitable locations for conducting the needed research. In addition, it will transmit information from free flow in countries.

Dr. George W. Lewis of NACA, has been appointed chairman of the committee and project work already has been undertaken through personnel assigned by committee members, with Leon O. C. Buehl, of the Navy Office of Procurement and Material, acting as temporary executive secretary to coordinate the work.

Shifts to Mustang

North American Aviation's Inglewood, Calif., base plant went into full production of Mustang fighters last Friday following a changeover from B-25 manufacture that was completed in the midst of production of both designs.

At one point in the assembly of the last B-25, jigs and fixtures were taken from the line and removed from the building seven minutes after they had been in use.

Actual changeover was accomplished in less than two months. North American's Kansas City plant will complete the B-25 contract formerly in production at Inglewood.

Aircraft Officials' Stock Dealings

SEC sets reports on transactions of company executives in stock of own firms.

Lawrence D. Bell, president of Bell Aircraft Corp., sold 1,446 shares of the company's common stock during May, according to reports on aviation company officials' dealings in their own company's stock, filed with Securities and Exchange Commission. At the close of the month Mr. Bell owned 39,011 shares of the stock.

John J. Daly, director of Republic Aviation Corp., reported purchase of 1,000 Republic common, increasing his holdings to 15,324 shares. Edward Z. Peire, president of Solar Aircraft Co., bought 2,050, giving him 16,020 shares at the close of the month. Mr. Peire also held 360 preferred A at the end of May.

Lockheed—Carl B. Squer, vice-president of Lockheed Aircraft Corp., reported the sale of 500 shares, leaving him 1,500.

Ralph V. Hart, vice-president of Douglas, bought 50 shares in May, which represented his entire holdings in the company at the close of the month. Dwight Whiting, director of Douglas, reported the purchase of 100 shares of the capital stock through a trust.

Randolph C. Walker, president and principal stockholder of Aircraft Accessories Corp., sold 1,999 common, reducing his holdings to 94,330 shares. Gilbert Colgan, director and principal stockholder of Air Associates, Inc., sold 100 common, leaving him 17,343 shares at the close of the month.

► Airlines Quiet.—There were no sizable transactions by officials of the commercial airlines in their companies' securities. John H. Phipps, director of Eastern Air Lines, Inc., reported sale of 300 common through a holding company. Kenneth E. Ferguson, vice-president of Northwest Airlines, Inc., reported the purchase of 100 common. Robert Lehman, director, and John S. Woodbridge, controller, of American Airways Corp. reported sale of 500 shares and 600 shares respectively.

Three vice-presidents of Transcontinental & Western Air, Inc., G. F. Hays, John A. Collins, and John C. Franklin, and Thomas B. Wilcox, director, reported purchase of 78 shares, 149 shares, 22 shares and 250 shares respectively, of the company's common.

Six Months' Plane Output 51,960; Heavies Top Schedules in June

Total production last month shows decline of 9.5 percent, traceable partly to shorter work month, says Charles E. Wilson; B-29 plans are bright spot.

By SCOTT HERSHY

In the first six months of this year, the aircraft industry produced 31,960 airplanes, despite the fact that output last month dropped to 6,046, lowest monthly figure since last December.

More important, however, were the figures which showed that June output in terms of service weight—only the accurate yardstick—was approximately 100 million pounds and that output per working day was just over 3,000,000 pounds. While the industry dropped below schedule in June, the production of a Navy fighter, not decided, which Wilson thought probably would be made up in part.

► Heavy Bomber Output Up.—Output of all four-engine bomber types exceeded June schedules. The B-29 plane, which Wilson declined to identify but which undoubtedly was the Whittier plane, exceeded its schedule and others engaged in

at this time—was down, due to difficulties in obtaining certain parts, and that the output would be made up within the next few months.

There were two other categories in which the output was off. The Consolidated C-48 cargo plane was about 40 under schedule and Wilson said some of these might be made up, although the plane has some difficulty even this month in meeting schedule. The other item was the production of a Navy fighter, not decided, which Wilson thought probably would be made up in part.

► Heavy Bomber Output Up.—Output of all four-engine bomber types exceeded June schedules. The B-29 plane, which Wilson declined to identify but which undoubtedly was the Whittier plane, exceeded its schedule and others engaged in

► Drop Not Serious.—The production under schedule last month generally was described by Charles E. Wilson, head of the Aircraft Production Board, as not serious but regrettable. "The drop last month has the past output being under 8,000 and then it was 7,393. Top unit production was last March, when 8,127 airplanes were produced."

That, which was described in some quarters as a dangerous slump was not in that category at all. Wilson noted that the situation was dangerous only if continued and he added his assurance that it would not continue, and second, it was dangerous only if the reasons for the drop were basic. He asserted they were not.

► Reasons for Drop.—Part of the drop was attributed to the shorter work month, and not to the failure to meet schedules on the part of three companies, which Wilson declined to name, producing smaller types of planes, because of unusual circumstances, which arose during the month. He also stated that the production of fighters—not a vital part of the program



CITED FOR AAF PILOT TRAINING:

May C. C. Montley, president of Cal-Aero, Miss Lane and Robert Knight command and Curtis-Wright Technical Institute, use given an American Legion citation for distinguished service in the training of Army Air Force pilots and mechanics. Photo shown, left to right: Van D. Hagan, past commander, Department of California, who made the presentation; Brig. Gen. Morris F. Smolins, acting commanding general, western flying training command; May Montley; Brig. Gen. Donald F. Stutz, district commander, AAF Materiel Command; Col. Robert L. Smith, Jr., multiple air and author; and George F. Parrot, commander of Atlanta Post 226, American Legion.

The manufacturing program on Boeing's Superfortresses were approximately on schedule.

Wilson disclosed that Douglas' new Chicago plant, which is turning out C-54 Superfortresses, exceeded its output by about 15 percent and that this factory is now rolling out on a record production basis.

► Special Devices.—A report that part of the trouble last month was in connection with special devices designed to increase the range of the North American P-51 Mustang, the Lockheed P-38 Lightning and the Republic P-47 Thunderbolt was described as without foundation by aircraft production officials. All three of these planes were on or ahead of schedule.

While manpower remains an item of concern in aircraft production, it was not considered by production officials as a major factor in the June output. Wilson said there still was a job to do in connection with keeping manpower in the plants, particularly those producing the most-needed combat types and that this was "not a job which is held on as by any means" and that the problem extended into the thousands of feeder plants making parts for aircraft assembly. He said preliminary work on the B-32 continued.

Airport Experts To Meet in Capital

Papers to be presented by 16 national authorities at NAA Joint Airport Users Conference July 24-25.

Sixteen leading airport experts will deliver papers at the National Aeronautic Association's Joint Airport Users Conference at the Statler Hotel in Washington July 24 and 25.

William P. McCracken, Jr., NAA general counsel, will serve as chairman for the conference, with Glen B. Kauter, of Los Angeles, NAA vice president, as co-chairman.

Board in Session. The first session will hear William A. M. Sturden, Assistant Secretary of Commerce for Air; Sheldon B. Stone, director of the Michigan Board of Aeronautics; and Alfred MacDonell, director, State of New York. Commencement, Wichita, Kan. They will discuss civil aviation and aviation airport requirements from the national, state and community points of view.

Airport sessions will be discussed at a luncheon session, while airport requirements of privately owned aircraft will be the subject of a talk by Joseph T. George, Jr., vice president of General Aircraft Corp. and chairman of the Personal Aircraft Council, Aeronautical Chamber of Commerce.

Post-War Outlook.—W. Bailey Oswald, of Douglas and Clarence L. Johnson, of Lockheed, will discuss post-war commercial aircraft and their airport needs, while John Owens, manager of the Operations Department of the Air Transport Association, will talk on airport needs of commercial airlines.

The need for uniformity in airport classifications and the need for a nation-wide standard air market system will be discussed at a dinner session. Charles E. Sturden, Civil Aeronautics Administrator, and John E. P. Morgan, manager of the Personal Aircraft Council of the ACCA.

Legislative Problems.—Harry Maxwell, manager of the Air Transport Association of the ATA, will open the July 25 session with a discussion of legislative problems confronting airport planners, and state and national legislation will be the subjects of L. L. Schroeder, Michigan Department of Aeronautics Director and Chairman of the sub-committee on legislation of the Civil Aviation Joint Legislative

Licenses for Vets

Civil Aeronautics Administrator Charles I. Sturden has proposed to Civil Aeronautics Board that civil aviation regulations be revised to permit immediate applications. Under the proposed changes, a military pilot could apply for a civil certificate while still a member of the armed services upon submittal of his military rating, and type, horsepower and class of plane for which he holds military competency ratings. Authority for this will extend 18 months after the pilot has left the armed services. In all cases, the pilot would be required to pass the written examination as civil aviation regulations.

Committee, and Charles S. Rhynes, executive director of the National Institute of Municipal Law Officers. William B. Bryant, NAA president, will present a summary of the general conditions of the conferences and the session will close at a luncheon at which Gill Robb Mason, past president of NAA, will present the NAA national airport program.

U.S. Chamber Urges Federal-Aid Ports

A federal-aid airport system must be established to replace the trend toward financing of airport construction chiefly by the federal government, the Transportation and Communication Committee of the United States Chamber of Commerce maintains in a statement of policy now being voted on by its members at the Chamber.

In its second recommendation, the Chamber Committee urges that federal funds be matched in at least equal amounts by state or local funds. Joseph T. George, chairman of the Personal Aircraft Committee of the Aeronautical Chamber of Commerce, recently noted in a speech outlining the ACCA policy that individual communities are prepared to spend their own funds in airport construction.

Other recommendations for the proposed statement of U. S. Chamber policy were:

- Federal funds should be restricted to grading, drainage, construction of runways, lighting and other safety features.
- Federal funds should be apportioned by an equitable formula taking account of the needs of the various states and localities from the viewpoint of a nationwide airport system, with due consideration for the provinces already made of airports from defense and war expenditures.

• State or local jurisdictions should be required to provide land, buildings and maintenance.

• A major part of such a program should be reserved for periods of low business activity.

• Administrative and financial responsibility for airport work should be concentrated in a single agency for each jurisdiction—federal, state and local.

• There should be airport planning surveys in each state to be conducted in cooperation with the federal agency on one hand and local airport authorities on the other.

• Plans for airport systems should recognize that privately owned and operated airports constitute approximately one-half of the total number of airports in the country, although a much smaller fraction of the total expenditures thereon, and that these private airports represent investments of great importance to the future development of aviation.

Governmentally financed airport projects which would result in destructive competition with existing private airports serving the same areas and types of aviation service should not be undertaken.

• Publicly owned airports should be put on a self-sustaining basis as soon as practicable.

Legislation carrying out many of the proposals of the U. S. Chamber is being prepared for Congress, and one bill already has been introduced by Rep. Jennings Randolph (D., W. Va.) proposing federal aid at the rate of \$469,664,000 a year for 16 years, with matching provisions included.

Master Plan.—The Civil Aeronautics Administration is preparing a master plan report to Congress, which is expected to form the basis for drafting of legislation to carry out a program similar to Randolph's. The ACCA and the U. S. Chamber.

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PRIVATE FLYING

Allied Aviation Builds 3-Place Twin-Engine Light Amphibian

New craft, constructed almost entirely of plastic bonded plywood, is scheduled for test flights shortly; designed for sale below \$4,000 in post-war market.

By BLAINE STUBBLEFIELD

A three-seat twin-engined light amphibian, scheduled for test flights during the past weekend, is planned for production by Allied Aviation Corp. of Cockeysville, Md., near Baltimore. It is built entirely of plastic bonded plywood, except engine mounts, landing gear, and a few fittings. The manufacturer hopes to bring the selling price below \$4,000.

Company reports it has found no other twin-engined light amphibians in process of development in this country. The test flight was to be made at the seaplane base of Andrews Overseas Airways at Baltimore.

100 a Month Output.—Officials estimate they could produce the planes at the rate of 100 per month if not for underparts.

Publicly owned airports should be put on a self-sustaining basis as soon as practicable.

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In their present plant, once occupied by Berliner-Jayco. They say they can deliver the first production unit within a month after they get clearance from the Government. The management is going ahead with tool installations at present.

The company was organized in January, 1941. It produced the LRA-1 13-place plywood amphibian glider for the Navy, and nearly other bearded plywood items, mostly sub-subsisted parts for other aircraft, such as skin, ailerons, aileron seals, in and outboard assemblies, and some aileron fittings. Also manufactured are such items as antenna cases, boat turns and outboard hulls.

One Glider Completed.—Only one

of the LRA-1 gliders was produced, because the Navy decided to drop its glider program just as Allied's first unit was completed. The LRA-1 is described as a "flat wing" design, whose low wings, partly submerged on landing, serve to maintain equilibrium in the water in place of the usual wing struts. Company engineers say the Navy glider, which was fully tested and accepted, and praised by the Truman Committee's investigators, was unusually efficient, having a sinking speed, fully loaded, of one to twenty.

The new light amphibian was designed by Gilbert Trimmer, after whom it has been named. Mr. Trimmer is an employee of Allied. L. L. Collins, chief engineer of the company, was formerly an engineer with Glenn Martin, Lockheed and Consolidated. R. S. Broad, 3rd, president, is also president of General Refining Co., Baltimore, he formerly worked with Vial Research Corp., which has patented plywood construction processes.

Feature.—A notable feature of the Trimmer plane is its detachable center section, which incorporates the two engines, all engine instruments, throttle, switches, battery, flaps and flap controls. It is attached with a steel linking substructure and can be removed by loosening four fittings. Only the aileron controls and the gas line



New Lightweight Amphibian: The Trimmer, Allied Aviation Corp.'s still uncompleted twin-engine craft for private flying and base operations. Hull is standing on wooden support, since retractable landing gear was not yet in place when this photo was taken for Aviation News. Engines had not been installed and cooling louvers were not yet cut. Entrance hatch is just back of wing. Another hatch is in the nose.



"The Trimmer" Three-quarter front view of Allied American's projected post-war product, awaiting awaiting the government's green light for production, which company claims could be stepped up to sale of 196 a year. Turns of retrained military pilots and school flying and serve as leaders against mooring docks and boats.

need be disconnected. The outer wing panels, which have the wing slots in their leading edges, are detachable by removing four fitting bolts.

Detachability of the leading gear is an interesting feature of the Trimmer. Two drum-shaped tanks can be placed in the wheel recesses, adding 36 gallons of fuel, making it a complete unit, of long-range.

Needs No Hangar—Company engineers say all water has much less destructive effect on plastic bonded wood than it has on the usual airplane metals. The amphibian can be left in the water, or beached dry without bad effect. They say that it needs no hangar.

Two engines power it and partly to improve maneuvering in the water, to obtain the usual safety factor resulting from two engines, and to ram the efficiency of water outboard power. The plane has conventional controls and conventional flight characteristics.

Molding Patents—The corporation is licensed under the Vidal process of fluid molding of plastic bonded plywood. Company spokesmen emphasize that personnel's extensive experience in the design, manufacturing and processing of plastic bonded molded plywood, wood assemblies, and metal fittings. It has conducted production research on other-than-wood materials and is in a position to produce items from CO-RO-LITE, fiber-glass laminates, and combinations of materials.

If the Trimmer amphibian is well received, Allied expects to design a five-place plane of the same type. This plane, if developed, probably would need 125 hp engines. It might partially use the same outboard wing panels.

Business and Pleasure — The Company expects to find a market among sportsmen and other pleasure and business flyers who want to increase the utility of their planes by using available water facilities in addition to limited land facilities. They believe a good demand will be found in South America and other regions that have not developed many airfields. Some fixed base operators have already made inquiries.

Southeastern's New Program Starting

Conversion outlined from war training to role and service for private flyers and feeder operations.

Southeastern Air Service, Inc., which operates two schools turning out thousands of aviation cadets for the Army Air Force, has started converting a portion of its operation to civilian flyers.

The company's two big primary schools at Savannahville, S. C., and Jackson, Tenn., have taught some 5,000 cadets to fly in the last 30 months. The experience of this war flight training had given the company considerable know-how which it intends to use for the benefit of post-war aviation.

Display Plans—First actual step toward conversion was a display of novel aircraft in an airplane display room at Jackson. Curriculum in the Army pilot training program is closing the school there.

The company arranged the afternoon display, starting with a Stinson Voyager, as a means of re-acquainting the public with private airplanes.

Next step in Southeastern's program of private flying service is

establishment of a regional-wide series of major and associate bases. The major bases are to be company owned and operated. The associate bases are to be owned and operated by individuals, cooperating in Southeastern's sales plan and providing standardized Southeastern repair and maintenance service.

Package Service—This system of bases forms the kernel of Southeastern's "complete package" service for private flying. It includes airplane sales, insurance and financing, ground school and flying instruction, repair, major overhaul and maintenance, fly-yourself manual, charter, photography and crop services and accessories sales.

Executive offices for Southeastern's system are in Atlanta, Ga.

Leads Policy—Cody Loebe, president, said the "complete package" program was drawn with the idea of providing private flyers the same type of service and facilities available to automobile owners. He said the company believes airplanes must be kept airworthy for the owners at all times, both for the sake of popularizing private aviation as a utility and for safety.

The company has also projected a feeder airline system in the Southeast through a subsidiary, Southeastern Air Express, Inc., which has an application before CAB for routes in nine states, serving 86 cities.

Specifications

Manufacturer's specifications and other data for the Allied Trimmer:

Weight, gross	2180 lbs.
Weight, empty	1475 lbs.
Length	42 ft.
Height	10 ft.
Wing span	35 ft.
Wing area	904 sq. ft.
Wing loading	23 lbs.
Speed, maximum	135 mph.
Top speed	148 mph.
Landing speed (with gear)	48 mph.
Range, two pilots	680 mi.
Range, three pilots	500 mi.
Range, two, each with 75 gal. fuel	400 mi.
Time	4:00 x 5

Leading gear, oleo type, retractable, with brakes. Propellers, laminated wood, adjustable, on ground, disc diameter 6 ft. 6 in. Note: Auxiliary drum tanks, mounted in wheel recesses if landing gear is retracted, carry 75 gallons of extra gasoline each.



Dry run Susie

Around the big training hangar at Lockheed's Service School they call it "Dry Run Susie"—an accurate replica of the P-38 cockpit, with instruments, gauges and controls all in their proper places. A working textbook to show military student mechanics the operating and maintenance characteristics of America's most versatile fighting plane.

Cockpit Without Wings

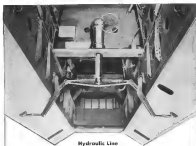
This cockpit without wings never leaves the ground, but in its operation it exemplifies the kind of practical training taught by Lockheed in its instruction at the factory school. Each future

ground crew man spends time in the pilot's seat learning the instruments of flight. This is but part of the fundamental training he gets. When this 30-day postgraduate course is completed he is an expert P-38 mechanic—ready to follow workplans into action, wherever they may flight.

A Place in the Future

Lockheed will produce military planes and train the men to maintain them as long as there is a need. Victory must be won before the "str age" of peace can begin. But when it comes, Lockheed will be part of it—building planes, getting them ready to fly and keeping them ready to fly.

LOOK TO **Lockheed** FOR LEADERSHIP
LOCKHEED AIRCRAFT CORPORATION, BERRANK, CALIFORNIA



Hydraulic Lift
operating the bomb bay doors
on the DOUGLAS HAVOC A20

"AN" Pipe and Tube Fittings

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Providence 1, R.I.

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TELLING THE WORLD

- The West Coast Aircraft War Production Control has issued a comprehensive booklet explaining "five years of industrial teamwork for more airpower per hour."
- FAD employee publication of the Fordville division of Ford Motor Engine and Airplane Corp. which is now being published every other week instead of each week, announces the following changes: E. T. McClellan becomes editor and Barclay Ann Corner becomes associate editor, succeeding Edwin L. Greene and Mary Pat Piquet, resigned.
- Richard C. Carr has been named manager of national advertising for Westinghouse Electric and Manufacturing Co.
- Frank C. Shorge, formerly with Dendin Aviation Corp. is now advertising manager, Imperial Power and Color Corp., Glens Falls, N.Y.
- Pennsylvania-Central Airlines' employee publication, PCA News, received a special award in recognition of its contribution to the 1944 American Red Cross War Fund.
- Newspaper ads in 325 publications announced the Sun Oil Co.'s new Air-War Mutual on June 18. The promotion has the double purpose of furnishing materials with timely data on the invasion and informing them about the company's super aviation fuel concentrate, Dynalene, which was developed by Sun Oil engineers and chemists in speed up production of 100-octane aviation gasoline for the Army Air Forces.
- The War Advertising Control is now at 11 West 52nd Street, New York, since 1941.
- Jacobs Aircraft Engine Co., Port-Haven, Pa., has given its consent to L. E. McGinnis and Co., Inc., New York. Media will be national, business and aeronautical magazines and financial newspapers in Canada, Latin America and other foreign markets.
- Canadian Pacific Air Lines has announced that its monthly issues begin The Reader, with its longer and noteworthy items covering the activities of CPA will be carried in the Canadian Pacific Staff Bulletin, serving the railway staff.
- V. A. Kerschner has resigned from the Lockheed Aircraft Corporation to form an advertising agency under the banner of Kerschner, Inc. Offices have been opened in Hollywood at 1365 Cromwell St. of the World.
- Young and Rubicam, Inc., New York, has been awarded a War Department contract to serve as advertising agency for the Women's Army Corps recruitment program for the 1945 fiscal year beginning July 1.



Old Sykes has a new truck on order

Air commerce begins and ends on the ground . . . and its roads already reach deep into many a small American community.

Even the local experience has become aware of Blue Super's stake in air commerce, and of its growing importance to him as an individual. For the rise of air commerce in air cargo is but one off-shoot of a more important phenomenon: the phenomenal growth of cargo between airline cities.

This trend should encourage feeder line planners and forward-looking communities. Less than 300 American cities enjoy direct

air service today — 1,700 cities of 5,000 or more population are candidates for the air map of tomorrow. Each service is one of the best big steps toward providing the full link which is air transport's real pay load.

In this development, Wright Cyclones will make their own contribution to operating economy by their economy of fuel consumption and maintenance. And because they weigh less than comparable power plants they will provide an additional payload bonus Wright Cyclones pay their way.



Cyclones Save 3 Ways

LESS WEIGHT—MORE PASSENGERS
LOW FUEL CONSUMPTION
MINOR MAINTENANCE

WRIGHT

Aircraft Engines

"One Pound Saved Can Earn \$180⁰⁰ a Year"

SAYS BRUCE E. BRAUN
Vice President, Operations
Chicago and Southern Air Lines

"In carrying a 200-lb. passenger on a round-trip schedule from Chicago to New Orleans, the revenue to us would be \$94.25. Translated into per pound revenue, this is approximately 3.5¢. If we save one pound each day throughout the year, the saving would amount to \$180.00. We are very much interested in the weight-saving use of Boots Self-Locking Nuts. Through their application on Chicago and Southern planes we will be able to capitalize their pronounced weight-saving characteristics."



Send for Free Boots Weight-Saving Booklet Today!—Actual weights of over 250 different self-locking nuts used in aircraft, comprehensively reviewed for the convenience of aircraft designers, engineers, operating and maintenance personnel. Copy will be sent you, free, on request.



Boots Self-Locking Nut (Type A-33). This self-locking nut is 40% lighter than a comparable flow nut.

BOOTS SELF-LOCKING NUTS
They Fly With Their Boats On Lighter

Boots Aircraft Nut Corporation, General Office, New Canaan, Conn., Dept. L

UP TO 60 LBS. PER PLANE SAVED BY BOOTS NUTS

- Being of metal, this nut is **Tougher** and **Safer**.
- Can be used over and over again.
- "Outlasts the plain."
- New standard technique on many types of military aircraft.
- Will be discarded on commercial planes after flight.
- Approved by all government testing agencies.

THE AIR WAR

COMMENTARY

More Pacific Advances Are Near; Black Widow Joins Night Fighters

Commander hints at Philippine landings by year-end; Kenney's new Fae-Eastern air force ready to suffer Jap resistance, new data on night fighting techniques disclosed.

The first tangible result of the epoch-making Nimitz-MacArthur conference last spring is being written large in the headlines—the 1,200-mile leap from Kweilin to Batjan. At least one other should be breaking within the next few weeks—a jump from the Schouten Islands to spouting Halmahera, some 544 miles distant to the northwest.

The clean-up of Blak Island (largest of the Schoutens), with the capture of the two remaining airfields, Boroboro and Soeda, sets the stage for the next advance. From Halmahera to Deves on Mindanao Island is less

than 400 miles. By the time MacArthur is set to storm Mindanao, Nimitz should be ready to send a hard-hitting task force down Bataan against Luzon, some 1,600 miles slightly southwest that MacArthur himself will return to Luzon is accepted as a foregone conclusion.

➔ **Action Stopped Up**—It may be so the fantasy side but it is doubtful if anything on earth would give him a greater thrill than to land in there on Dec. 7, 1944. These moves, coupled with stepped up aerial action and amphibious landings in the Bonins (800 miles north of Tokyo) and the

hardies to the north, would transform the Western Pacific basin into the Nipponese must even now regard as an enemy-occupied lake, to an American pond.

➔ **Powerful assaults** on Formosa, the China coast and the southernmost Jap island of Kyushu would then follow as a matter of course. Stillwell's Chinese-American forces, including Chennault's 14th Air Force, and the Twentieth Bomber Command, together with Mountbatten's forces, combine to make up the other part of the view now grasping the Japanese apparatus.

➔ **Time-Table Advanced**—It is clearly evident that the sensational advance of the Central Pacific Fleet—Seventh AAF Bomber Command team through the Gilberts—Marshalls—Caroline during the past winter and spring, coupled with General Kenney's aerial leapfrogging along the New Guinea coast, has set the Allied strategic time-table forward by many months. An analysis of the communique was indicative that the Jap has pulled back his air power from the outer defense perimeter since his disastrous losses in the New Guinea area, the Marshall bases and finally at Hollandia. However, there are reports that Halmahera air strength is being built up, and this



Northrop's P-61 "Black Widow": This powerful combat plane is the first night fighter built as such from the drawing board up. Only a brief announcement has come from the War Department regarding its

specifications, but more will be heard of the P-61 as it gets into active action against the enemy. It is powered by two Pratt & Whitney Double Wasp 2100 hp. engines, and has devastating firepower.

PERSONNEL

Walter Chasens, nationally known hotel man, has been appointed to the newly created position of director of food and restaurant service for Northwest Airlines.



He will direct the setting up of a new uniform commissary service along the Northwest system and will improve the restaurant facilities operated by NWA in the Twin Cities, Minneapolis and Spokane. He has been associated with the Drake and Merriam in Chicago, Miami, Baltimore, Astor and Sherry-Netherland in New York.

D. W. Anderson has been named sales manager of Republic Aircraft Co., Irvine, succeeding Walter Shaw. Shaw has been released for a series of special assignments.

L. A. Kewenig, formerly executive assistant to the president of Interstate Aircraft and Engineering Corp., was named secretary at a board meeting. At the same meeting, W. C. Bessent, formerly assistant secretary-treasurer, was appointed treasurer. The two executives will assume the duties of the former secretary-treasurer, L. B. Conners, who recently resigned.

Irvin W. Phillips, chief of the transportation section, procurement division, AAF Materiel Command, has been promoted to the rank of colonel. Colonel Phillips' assignment is responsible for the settlement of contracts for material that is either available in sufficient quantity or so large needed because of revised aerial strategy. He is a member in civilian life.



W. F. Long has been elected chairman of the board of Burns, Roe & L. H. Lindsay, F. Y. Hall, R. C. Marshall, Jr., and G. W. Merriam were elected directors. Marshall was re-elected president. Long, Lindsay and Merriam, vice presidents and Hall, secretary and treasurer.

Allen W. Harris, formerly assistant editor of the Baltimore Sun, has joined the public relations staff of

Pittsfield Engine and Airplane Corp., Pittsfield, C. R. F. Maradeo who has become an aviation consultant. An assistant in Joseph H. Lewis, Jr., director, Harris will be editor of *Papamiro*, company publication.

Col J. R. Cunningham has been released from active duty with the Army Air Forces and has returned to his position as director of communications for United Air Lines. Colonel Cunningham was called to active duty in 1942 and served for two years, acting as liaison officer to the British Air Ministry for several months.

Charles Gross, formerly assistant general sales manager of Aerochemical Products, Inc., has joined Macleay Machine and Tool Co., Detroit, as sales manager.

Frederick P. Kobusz, vice-president and secretary of National Aircraft Corp., has been elected a director.

Charles H. McGinnis, chief of the General Procurement Branch, AAF Materiel Command, has been promoted to the rank of colonel.

He and his branch are responsible for the procurement of all aircraft accessories, semi-material and component for the AAF. Several hundred thousand different items, including accessories, instruments, mechanical, personal equipment, parachutes, life-saving devices, tanks and lubricants, are procured by them.

R. G. Allen has been named sales manager Midwest division of Littlehite, Inc.

G. E. Stenstrom, former sales manager of Tensstedt Manufacturing division, General Motors Corp., has been appointed assistant automotive sales director of Bendix Aviation Corp.

Way Nelson "Buck" Stiers has resigned his AAF commission to return to his position with the Michigan State Board of Aeronautics. Stiers has volunteered his services to the Michigan Wing of the Civil Air Patrol and has been appointed to the wing staff with the rank of major. Major Stiers organized the CAP in Michigan. He was assigned to CAP training headquarters and helped organize the nation-wide Patrol.

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SOLE CIVILIAN LAB CHIEF:

J. B. Johnson, nationally recognized as an authority on aircraft materials, is the only civilian director of an AAF Materiel Command laboratory at Wright Field. He began research for the weapons section of the Signal Corps at Dayton in 1918, when he was the only person in the laboratory. Now there is a staff of 250 working in a laboratory where the equipment is valued at over \$350,000. He is credited with an important role in development of welding processes used in aircraft construction. He was awarded the James Turner Merchoed medal in 1929 by the International Aeronautics Association. Johnson is chairman of the SAE national committee on materials and processes, and a member of the National Advisory Committee for Aeronautics.

G. M. Williams, director and senior vice-president of Curtiss-Wright Corp., has been elected executive vice-president. Williams has appointed F. B. Taylor, vice-president, as senior general manager.

N. C. Bartholomew has joined the executive staff of Mercury Aircraft, Inc., appointed to the position of production manager. Bartholomew has a long record with the Airplane Division of Curtiss-Wright Corp., where he acted as assistant to the general manager of the Curtiss-Wright plants at Buffalo, N. Y.



J. H. Lucas has been appointed assistant general manager of Dominion Skyways Ltd., with headquarters at St. John's, New Brunswick. Skyways is an observer's school operated by Canadian Pacific Air Lines. Lucas is

Need a Motor that can lift 500 times its own weight?

This electric motor weighs only a pound. But more power is packed in that one pound of motor than has ever been before.

With Lear proving it can handle a quarter-ton load.

And it has to be ready to do that in an instant. Because this motor moves control flaps, and heater shutters on wingpanels. And air pressures mount high at the speed these ships fly.

On aircraft, even the weight of a cone of paint has to be considered. So this motor had to be light.

There's little room in an airplane. So it had to be small.

Designing it meant starting from scratch. There was no precedent for this kind of engineering.

You may never need a motor like this. It may cost more than you might want to pay.

But if you are looking ahead toward mass-producing some positive product, we want you to know that such a motor has been developed along with 250 other Lear products.

And equally important, we want you to know that there is available the kind of engineering thinking that could conceive and produce it.

PLANT: Plain, O., and Great South Bay, NEW YORK. Also New York, Los Angeles, Chicago, Detroit, Cincinnati, Providence.

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TAKES OVER NAVY PUBLIC RELATIONS.

Rear Admiral A. S. Merrill, right, new director of the Office of Public Relations for the Navy Department, who has been in command of South Pacific task force and is shown here in an informal pose as he bids farewell to Rear Admiral James L. Knudsen, Commander, Cruisers and Destroyers, Pacific Fleet, in Pearl Harbor. He succeeds Capt. Leland P. Lyne, who is taking over a sea command.

transfering E. H. Wendler who has returned to England. He will retain his position as superintendent of maintenance.

Capt. R. L. Sharp, of the Union of South Africa Air Force, was recently on a tour and special engineering mission of Canadian aircraft plants.

Charles A. Lusk, aviation pioneer, recently assigned as production engineer at the Ford Willow Run Bomber plant and is now main engineer of the Pease Manufacturing Co. of Arlington, N. H. Prior to joining Ford, Lusk served as chief project engineer of the Curtiss-Wright Corp.



Alvin Mussey of the Packard Motor Car Co. was re-elected president of the Automobile Council for War Production. Clarence W. Avery of Murray Corp. of America, Robert F. Shick of the White Motor Co., C. C. Caruso of Motor Wheel Corp. and Paul G. Hoffman of The Standardizer Corp. were re-elected vice-presidents. George W. Mason of Nash-Kelvinator Corp. was made treasurer and John W. Anderson of Anderson Co., secretary. Directors re-elected for a three-year term in-



SOVIET MISSION VISITS PAA

In an informal session, their exploratory talks on international air transportation with U. S. officials, these members of Russia's air mission visited Pan American Airways' Atlantic Division here at La Guardia Field. Left to right are Maj. Gen. N. A. Petrov, Maj. Gen. P. P. Berezin, John C. Leslie, division manager; Maj. Gen. A. A. Anisovich and Maj. Paul Anzov, interpreter and Assistant Military Attaché for Air at the Russian Embassy in Washington. They are watching a Link trainer operation.

year term, and George Rosner remains as managing director.

William Cook, vice-president in charge of operations of Aircraft Accessories Corp., and Joe Weiss, vice-president in charge of finance, have been elected directors of the company.

Mervin L. Perry, new superintendent of control operation for United Air Lines, is making a systematic analysis of the experience needed in United ticket office to receive a late post-war increase in air traffic. His goal is to obtain maximum efficiency in ticket office operations and provide the greatest possible convenience to passengers.



A. G. Campbell Gyle, assistant to the chairman of British Overseas Airways Corp., has been in Winnipeg for discussions with O. T. Loran, vice-president of Trans-Canada Air Lines and other TCA officials. TCA is the official agent for BOAC in Canada.

Paul B. Collier was re-elected president of Northeast Airlines, Inc., at a special meeting of stockholders. Samuel A. Schewe remains chairman and Wilson H. Anderson and Howard D. Ingalls, vice-president, H. Lefebvre remain as directors. Eight directors were re-elected including: Anderson, Robert F. Knudsen, Collins, James S. Fitzgerald, David Harris, Bida Trimmer, Ingalls and Rogers L. Vail.



1. Contrary to the trend in other technical fields, the number of instruments and controls tends to increase with the power and size of aircraft. But just as complex conditions in other fields are being handled automatically, the Simmonds-Hobson Automatic Engine Control provides for the known variety of conditions in aircraft engine operation.



2. No one would consider buying a 5-hp radio today. Modern electronic engineering has demonstrated response of absolutely equal clarity with only one vibration and one volume control.



ENGINEERING GROUP PUTS INTO EFFECT TYPE OF ALIAS AIRWAY

Automatic Engine Control, Fuel Fuel Control, Spark Plug, Hydraulic Accessories, Hydraulic Pump, Chassis and Radiators, Tail Rotor and Tail Bearings, Tailors and Clips of Aircraft Engines

Branch Offices: Dayton • Washington • Hollywood • Montreal



3. A captured Doka Wolf 120 delivers a master engine control locating engine operation in one lever for four flight conditions. The vibration of automatic controls by a mechanical engine control is ignored.

4. Simmonds is now producing a proven control which releases the pilot of constantly watching manifold pressure and adjusting his mixture. New models will soon control automatic control to other important engine functions. Simmonds engineers will be glad to discuss the application of these controls to military or commercial aircraft.



Manufacturing Plants: New York • Vancouver • California

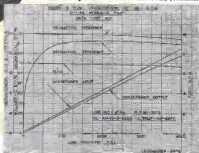
The new LEUBRO Pump was engineered to include a combination of long desired features to answer urgent demand of the aircraft industry. The LEUBRO Pump meets the overall requirements of all systems up to 2000 lbs.—delivers 3 g. p. m. at 1500 c. p. m. It performs with minimum heat rise— is self-lubricated—withstands torsional vibration—is extremely quiet in operation, of all pressures. Positive type, all metal all seal prevents all leakage during the entire life of pump.

The new LEUBRO Pump will take the terrific strains and constant pounding of a 1000-lb. system, even though light enough in weight that it can be used from both an efficiency and weight standpoint on any system.

The LEUBRO Variable Volume Pump, which completely eliminates the unloading circuit, also has adjustable outlet pressure and adjustable pressure differential. These features have never before been incorporated in a pump.

Complete information and engineering
service available.

Check below gives details on efficient LISTS.PAGE performance



VARIABLE VOLUME
Compact 6 3/4" long
Lightweight, 9 pounds

All parts are interchangeable

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Aircraft Yearbook Summarizes Allies' Phenomenal Air Progress

Gives aerodynamic refinements in planes, increased engine power and efficiency and propeller development; credits constant improvements in Lockheed planes to war stimulus.

Continuous improvement in combat performance of our aircraft under the stimulus of war was pointed up in Aircraft Yearbook for 1944 which summarizes the chief factors as aerodynamic refinements in planes, increased engine power without corresponding increase in size or weight, and development of improved propellers.

In external aerodynamics, the reference annual of the Aeronautical Chamber of Commerce notes that extensive improvements have been made in nacelle shapes and location, in cowlings forms, in spinner shapes, in the elimination of scoops, vents and bulges, and in the control of accidental air leakage.

Power Sources—In internal aerodynamics, improved air ducts for engine cooling radiators, oil radiators and carburetor air radiator have served to reduce power losses.

Among other improvements cited are refinement of wing shapes, fuselage shapes, wing-shield shapes, tail profiles and reduction or elimination of the wire drag caused by exposed wire heads, sheet metal laps, inspection doors and landing gear cover plates, all of which have contributed to the improvement of efficiency in air combat situations.

Greater Efficiency—In the field of aircraft power plants, improved fuels, better cooling and improved working conditions in the cylinders, brought about by better valves, piston rings and lubricants have aided in the development of greater power for less weight.

Weight per combi horsepower has been reduced about 40 percent and reliability and service life greatly increased. By the use of multiple rows of cylinders in radial engines, the horsepower per square foot of front area has been increased about 300 percent. The tremendous improvement in all

laid performance has been created by extensive research and engineering in supercharging systems which permit the engine to develop new level power at high

Propellers—There has been real, real improvement of propeller thrust in take-off, in climb, and in high speed and also in effectiveness of the propeller in assisting in cooling the engine. The yearbook cites improvement in the blade profile as a result of high-speed wind tunnel studies and also through improvement of the blade shape, including use of ruffs near the propeller hub as factors contributing about 18 percent to the

net propulsive efficiency of propellers

The United States now has in service more than 75 types of military aircraft ranging from trainers to the most devastating combat planes. It has at least five different models of fighter planes with speeds over 400 mph, while England has three, Germany two and Japan none. Listed are the Army's Lockheed Lightning, Republic Thunderbolt, North American Mustang, and the Navy's Grumman Hellcat and Vought Corsair.

2 Outfought Axis Planes—These with the British Sparrow, have outfought both German and Jap under all conditions. The Bell Arrow and the Curtiss Warhawk, the best fighters, have been effective in the particular kind of fighting for which they were designed. The Arrow has been highly effective in the Russian drives and the Warhawk continues to destroy the Axis in the Asiatic theater.

No enemy bomber has approached the range, bomb capacity, accuracy and defensive power of our Boeing Superfortresses and Flying Fortress and Consolidated Liberators. Neither German nor Jap has produced anything comparable to our twin-engine North Star, North American Mustang,



LANCASTER ASSEMBLY LINE

More and more Lancaster brothers are being turned out for Britain's tougher laws. Photo shows assembly line at one of the Ministry of Aircraft Production's Lancaster plants.



COMMANDO BECOMES FLYING WORKSHOP:

C-46 Curtiss Commandos, converted into flying workshops by the AAF Materiel Command, have been assigned to the Air Service Command as a task force for repair of damaged or grounded planes in advanced positions. Equipment of this airborne shop (looking

right) includes a grinder, arbor press, drill press, small lathe, welding apparatus. Power plant of 2,500 watts on 100 volts, an air compressor, and assorted tools. The airborne shop also can make quickly available parts of aircraft too badly damaged to be repaired.

chell, Douglas Harco, Lockheed Ventura and the British Mosquito. Howard Minge, editor of the yearbook, points out that our predominantly superior technical progress in flying equipment, our vastly increased production of strategically important combat airplanes, and the superb training and fighting qualities of our airman, are giving us absolute control of the air over all fronts, as essential to early victory.

New Republic Bonus

A second high bracket employee incentive bonus for the month between May 15 and June 9, amounting to 24.4 percent, has been paid by Republic Aviation, bringing the aggregate of bonuses paid for same periods of four-weeks each since last November to 175.9 percent.

Republic employees have re-

ceived the equivalent to seven weeks full pay, or 43 weeks pay in 34 weeks, reflecting their increased efficiency and resultant saving of manhours in meeting AAF schedules.

Contracts Discussed

Spokesmen for the aircraft manufacturing industry appeared before the War Contracts Subcommittee of the Senate Military Affairs Committee this week to discuss termination of war contracts, with labor and government witnesses following. Hearings are being held despite passage of the contract termination bill.

The chairman of the committee, Senator Murray, recently conducted hearings on the Brewster contract termination and was highly critical of the procedure as it affected the workers in the plants.

New Runway Built For Grounded B-24

Five hundred thousand pounds of steel matting, 100 Army Engineer personnel, a score of trucks cars and jeeps, and a twenty-lane camp with electric lights were required to take off a force-landed Consolidated B-24 bomber at Enterprise, Ore. According to the June 15 issue of the Willows County Chronicle which had been reporting the project for three weeks, the Engineers used a bulldozer to grade 300 yards of the runway in addition to the 2,300-foot steel mat, 186 feet wide.

1,104 Feet Lowway—The Chronicle quoted the pilot as saying he expected the bomber would be airborne at 3,100 feet, leaving him 300 feet lowway on the matting, plus about 1,600 feet of earth runway, mostly sod.



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BUBBLE CANOPIES FOR P-47s

Roses of Plexiglas bubbles waiting to be trimmed and finished are shown in this unusual photo at the structural plant of Rohm & Haas Co., developers of the one-piece radome canopy. It is formed by a special process designed to preserve the optical properties of Plexiglas and give improved wear-resistance. Plexiglas has long been used for bomber noses, gun turrets and observation domes.

New Type Aileron Developed by Martin

Said to permit increased load, shorter take-off and lower landing speed.

A new type aileron developed by William D. van Zelle, of The Glenn L. Martin Co. engineering department, is reported to permit a considerable lengthening of wing flap, thus increasing load, or shortening take-off run and lowering landing speed, as well as reducing the drag caused by the gap between the conventional aileron and the trailing edge.

The van Zelle aileron was designed as the result of extensive research into reasons for the lack of effective force on the part of conventional ailerons. These studies, Martin engineers said, revealed that the position caused by the balance portion or leading edge of the aileron created a turbulence in the air beneath the aileron, resulting in a loss of effective roll and an increase in control force for angles of more than 15 degrees up. The new aileron is said to supply the same degree of rolling moment as the conventional Piper aileron with a 35-45 percent reduction in span.

Closes Gap—The new aileron incorporates an auxiliary aileron in the combination with a seal elimi-

ating the gap between trailing edge and aileron which smooths the air under the aileron when it is up position, and at the same time balances the aileron with a force in the direction of roll, permitting twice as much upward deflection as is possible with the conventional type.

The auxiliary aileron or slab is extruded from aluminum alloy and is attached to the front or leading edge of the aileron with metal clips or plates. In the neutral and down positions it fits over a cut-out section of the trailing edge of the wing. Being a simple aluminum alloy extension, the auxiliary aileron is easily fabricated, yet it does not add weight, since it replaces the metal weights used in former ailerons to bring the center of gravity forward of the hinge point to prevent flutter.

Up and Tip-Back—The aileron assembly creates a lip angle for attaching it to the trailing edge. This removes all restrictions on upward deflection while still permitting a downward deflection of up to 15 degrees. The van Zelle aileron has been test flown successfully on an experimental B-26 Marauder, and is being incorporated in designs for post-war commercial aircraft where its added lift is expected to produce greater payloads and reduced operating costs.

Navy Modifying Army Helldivers

Curtis Helldivers built for the Army are being taken over by the Navy and modified at the maintenance base of Delta Air Lines in Atlanta, which until recently has been engaged in work for the Army.

The Helldiver has had a good record in recent Pacific fighting but the Army has virtually abandoned its dive bomber program and switched to fighter-bombers for that type of operation.

Go to Marine Corps—The Delta base is modifying the Army Helldiver versions for the Marine Corps air arm. The Navy Helldiver has been in action at various squadrons for some months.

Ford to Assemble All B-24's at Plant

All Ford-built B-24 Liberator bombers henceforth will be fully assembled at the Willow Run plant, ending the practice of building "cock-down" Liberators for shipment to Consolidated Valves plants in the Southwest for final assembly.

Ford announced production of 5,000 Liberators in less than two years. Approximately 1,800 of the total have been shipped out of the Ford plant in completed sections to be assembled at other plants. The rest have been assembled and flown away from Willow Run.

5,000 Built in Year—Of the 5,000 total, approximately 4,000 have been built in the last 12 months, Ford officials said. Willow Run's last production bomber was accepted by the Army April 10, 1943.

Helicopter Buses

Twelve- to 30-passenger helicopter buses traveling at 120 to 140 mph and carrying lighter cargo than airplanes are entirely practical for early production, Igor Sikorsky recently said the American Society of Mechanical Engineers at Philadelphia. Sikorsky outlined advantages of this type of aircraft in opening new areas for residential building, recreation, prospecting and other development now crimped because of transportation difficulties.



Great Pictures of the War... made with

Fairchild CAMERAS



Official U.S. Navy photograph

An old way to camera lens is the above famous Pearl Harbor picture.

But surprising news to most folks is that it was made not with a standard roll camera... but with a Fairchild precision aerial camera!

Action shots on land and sea, as well as from the air, are made with Fairchild cameras. Why? Because no matter how wild the action, no matter how far from the photographer it may occur... the Fairchild camera will give accurately detailed close-ups.

With focal lengths up to 60-inch, Fairchild cameras could make recognizable shots of your living room furniture from two miles up and do it in the black of night as well as in the light of day.

These are the reasons why many great pictures of the war, on land and sea too, are made with Fairchild precision aerial cameras.



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THE STORY OF AERIAL PHOTOGRAPHY IS THE STORY OF FAIRCHILD CAMERAS

Exquisite, top photos in *Warfare* (above) — a 2F Series 240. Co. photo is one of a series also taken with a Fairchild Aerial Model Camera.



CUBS IN ITALY:

New Signal Corps photo shows two Paper Cubes at a Field Artillery Group Headquarters with the Fifth Army in Italy. Ship on left is being worked up before a reconnaissance mission.

Writ Guards Secret Aluminum Process

An injunction restraining Duran B. Cox, former officer and director of Fairchild Engine and Airplane Corp., from disclosing a process for bonding aluminum to steel developed by Al-Fin Corp., Fairchild subsidiary, has been granted by the New York State Supreme court.

The suit was instituted by Fairchild and its subsidiary agent against Cox after he had left their employ and become associated with General Brezina Corp. The court enjoined Cox for five years from disclosing any knowledge of the bonding process.

Involves Secret Process—The justice held that the suit did not involve a patent principle, but rather a secret process which the court said Cox had acquired knowledge of while employed in "a confidential position under such circumstances as to make it inequitable and unjust for him to disclose the secret."

Tooling Dock Built By Convair

A master tooling dock developed by Leland A. Bryant, consulting engineer for Consolidated Tulse Aircraft Corp., is seen by company engineers as a prime device which will make it possible for manufacturers to build light airplanes faster and better than they could make automobiles in 1943.

Three Dimensions—The dock is a three-dimensional positioning

device, used in constructing the huge tools required in aircraft work, and despite the changes it has made in manufacturing procedure Bryant says it is a simple piece of machinery.

While its possibilities have not been exploited, the tooling dock has already affected savings in time and materials amounting to more than 80 percent for Consolidated

C-54 Material Analysis

Material analysis of a Douglas C-54 transport grossing 48,488 pounds discloses a consistently unexpected quantity of steel in its airframe structure. Douglas engineers report use of more than a ton of steel bar in the Skywarrior, and 2,295 pounds of steel skiving. Other materials prominent in the structure, beyond aluminum shapes and sheeting, are magnesium, 258 pounds; phenolic, 129 pounds; synthetic rubber, 102 pounds; aluminum tubing, 544 pounds; 1,397 square feet of plywood, and 181 board feet of other woods.

AA Uses New Latch

American Airlines is installing a new positive action door latch that provides multiple fastening at top and bottom as well as the center on all its planes. The lock was devised to simplify delays under the old system, which required use of two separate handles. The new latch was developed by American and Douglas engineers and has been approved by the CAA.

'Jeep' Missions

Reports on air observation post work by field artillery liaison plane crews disclose these incidents:

A runway 12 feet wide by 70 yards long was built beside an old LST (landing ship, tank) and Italian planes were downed, all claiming flight speed in about three-quarters of the run while the ship was headed at some knots into a 10 mph wind.

In Italy, observers were attacked by side, rearbase gun, light AA fire, and by Me-109s, FW-190s, Ju-87s, and He-111s in only one case were attacks made by single planes. "It is a tribute to the observer tactics taught in 1941 that the Artillery planes escaped in every case."

German artillery was pounding an American 155-mm howitzer battalion in Sicily. No alternate position was available. Forward observers could not spot the enemy. A radio call to a beach landing ship brought an air observer who spotted white flashes in the woods. The screen gave three corrections, called "the for effect" and saw the German position demolished.

One observer flew on 30 different days between Oct. 11 and Nov.

15. Longest time in the air for an observer was five hours, during which time he flew four missions. Average missions taken one and one-quarter hours.

Observation is better on a hazy day than on a bright day because while there are more clouds seen. Dawn and dusk are the best times to observe.

In recent fighting, whenever a Jeep appears, enemy guns are silenced and all personnel (infantry and artillery) remain quiet in the hope of escaping detection and remedial artillery attack.

Enemy fighters, which have difficulty getting near the gun-turming Cubes, often attack in pairs. To counter this, Artillery often sends two Cubes together, one flying below as a lookout and giving radio warning.

One observation post engineer in the Fifth Army devised a parachute drop gadget, so observation planes could supply troops scattered on a mountain. Water cans weighing 90 pounds and return, 65 pounds, were dropped on parachutes made of D-D blankets, which were also used.

Some of the foregoing incidents were reported in the Field Artillery Journal.



SPOTTING JAPS IN THE "WILLIWAWS"

moment to clear obstructions. They placed their nose and guns right on the fog line. Result—they could see the attackers but the attackers could not see them. And the wily Japs would shift up and down the mountainous coast, always keeping under cover of the fog. It's pretty hard to kill a foe you can't even see.

The Japs and the fogs weren't the only foes around Attu. Bent storms, sudden squalls, freezing clouds that had the wings of a bomber with a ton of ice in less than a minute. And the "williwaws" that can drop a plane 2000 feet in a few seconds.

But the Japs had to be beaten from U. S. and on a hazy... dead or alive, probably dead. That called for looking in weather on touch-down to the foe.

The Navy knew the Kingfisher was the bird to turn the trick... to spot targets and guide our bombing planes where they could drop their deadly eggs in the midst of the foe's storm hell. Because they saw Eds Flats equipped, Kingfishers (OS2Us) are known as the planes with "sea-going legs"—because they are able to land on rough water and get off again.

Up went the Kingfishers to serve as spotting planes for the carrier

launched planes assigned to carry out bombing missions. Targets designated by ground units were reported to flights of OS2Us based in the area and relayed through them to the bombing planes. Reversed positions and fire-holes of the enemy came under deadly and accurate strafing and bombing attack. A goodly number of grounded Japs were reported on the damaged target areas as well as many "probables."

There aren't any Japs on Attu now. Eds-equipped Kingfishers could climb higher than the Boeing Sea, and with the Karles only 600 miles away, the yellow crests of the coast planes with the "sea-going legs" can be counted upon to point the way down to the heart of Japan.

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Lag in Airline Issues on Invasion Traced to Post-War Prospects

Peak of industry's earning power probably set in 1943 for some time to come; failure of stocks to keep pace with rest of fir is believed realistic appraisal of problems to be faced on end of conflict.

As a leading "peace" group, airline shares were badly lacking in any boom market that followed the invasion.

With the successful opening of "D" day, neither active optimism in relation to see the end of hostilities in sight. In this light, the market has begun its realistic evaluation of the immediate prospects facing all industry. While the market as a whole, spurred by the invasion, has reached its highest levels for over four years, air transport equities have failed to keep pace with the general trend.

Post-War Prospects.—Yet, few industries have been heralded with as much post-war growth as has the airline group. Came the peace, improved technological developments would speed aviation's frontier. The industry would no longer suffer any shortage of pilots or other trained personnel. An abundance of equipment and facilities would be available and there no longer would exist any wartime restraints. The popular conception has been fostered that planes of wartime degree of intimacy will fly every inch on the basis from the smallest U. S. hamlet to the world capitals.

Now it is in this soil of atmosphere that considerable glamour and romance can be imparted to airline equities. Indeed, it has been this approach which is primarily responsible for the past market appreciation in airline shares. New stock formations were successfully made, premium legislation on the expansion to come.

Analysis By Investors.—With that day close at hand when the industry may be expected to enter these new vistas, the market strength by-passed airline securities for equities of other groups perhaps far less glamorous in the public mind.

Why this deflection? Simply

that the air transport future has simply been discounted in the past. Further, the basic fact has now become common power. Considerable over-discounting has occurred in the past and the market is becoming less inclined to deal in futures. It is becoming evident that the peak of airline earning power for some time to come may have been established during 1943. And this was due to abnormal circumstances. Expansion and pioneering always have been an expensive process. This is the period ahead. Considerable uncertainty at present in government legislation. The effects of enforced reductions in rates—particularly mail—are well known by now. It is a sobering thought to view declining earnings and even deficit operations for the airlines during the next quarter of 1944, a period when highly profitable operations was the lot for most industries.

Potential—It is with this back-



"Superfortress" Power Plant: Under assembly is a plant of Wright Aeronautical Corp. is one of the Wright Cyclone 18 engines of 2,300 hp each, four of which power Boeing's B-29 Superfortresses.

around that the present action of airline securities in the marketplace assumes a definite pattern. The accompanying table presents some highly significant relationships among the equities of the major air carriers. The range for 1943, together with the data when the respective highs and lows were made are shown. Also, the range thus far this year. The action since "D" day, when the general market advanced set in, to a current date, representing the prevailing market appraisal, completes the series.

It can be seen that there is considerable uniformity in airline price movements. The low mark of 1943 was generally established in January. As earnings gradually improved, market prices followed. With but one exception, the high mark for the industry was established in July 1943. It was at that time, too, when earnings were at their peak. Top prices for equities have never been equaled since that time.

Implications.—Peak prices for 1944 were generally established in March on the excellent 1943 earnings reports being released at that time. Significantly, this peak for the industry was below the 1943 highs. This important series of devaluing tops, if continued, can have serious implications. (For example, this type of market pattern has been recorded by aircraft equities for four years and longer.)

All carriers shown in the table equaled or exceeded their previous 1944 peaks during the current move but are of course some dis-

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tion of the Nation's quest for stronger and lighter aircraft, glass-reinforced plastics are today possibly the most demanded new development in aviation.

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ing under moisture changes), and unusually high fatigue resistance under vibration and stresses.

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Another type of Fiberglas blanket insulation, these Fiberglas blankets are made of Fiberglas insulation, West Type M, lined with Fiberglas. One blanket with glass cloth available is 1½ in. and 2 in. thickness. They are extensively used to insulate engine heat exchangers, heat exchanger ducts, other high temperature pipes, etc.

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Another all glass product—comes from Fiberglas, Inc. While extremely useful for building tanks, ducts, and other structural equipment, other applications have been found for these new insulating, nonflammable tapes. In use—such as covering of metal surfaces on hot air ducts, for its excellent insulating power, etc.

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The use of Fiberglas cloth as base fabric for coating with various resins allows for excellent, vinyl, epoxides, and other coating materials, provides a finished material having low cost and unusual qualities—great dimensional stability and strength under the most severe conditions of humidity, temperature and hard usage in service. Widely used in the fabrication of sign light enclosures, insulation covering, ducts, containers, various types of coverings, boats, hot ovens, motor housings and many other items.

FIBERGLAS . . . A BASIC MATERIAL

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RETAIL SALES—State and regional breakdown of buying power, buying habits, etc.

AUTOMOBILE REGISTRATION—Close to transportation requirements, state of buying income. Influence on aircraft sales.

AIRCRAFT REGISTRATION—Factors of past aircraft acceptance by state and region.

PILOT REGISTRATION—Pilot registration, potential pilot registration. Close to necessity and acceptance of aviation.

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TRANSPORT

ATA Group Resumes Plans for Post-War Commercial Transports

Aircraft Requirements Committee repeated making good progress on specifications and performance of ideal four-engine type.

By MERLIN MICHEL

Planning for post-war commercial transports has been resumed by Aircraft Requirements Committee of the Air Transport Association and Air Cargo, Inc., after a three-month lull while the group tackled conversion problems in connection with the return of planes to the airlines.

Having some time ago agreed on specifications and performance requirements of proposed new two-engine types, except for recurrent revisions, the committee now is progressing rapidly on the ideal four-engine type. A fifth type may be added to the four originally recommended to manufacturers. This would be a four-engine, all-cargo plane.

The types are known as the ATA-A1, ATA-A2, and so on. No designs have been drawn, but specifications have been turned over to manufacturers as they have been completed. At least some of the committee's ideas on the first type are incorporated in Douglas' "Skybus," patterned on the Norse cover this week.

Committee recommendations have a general flexibility. They have been completed on the A-1 and A-2 craft, and the group now is working on the C-1, which, with the D-1 and the long-range all-cargo job, will be four-engine.

Committee members will meet in Chicago early in August and have been urged to complete work as specifications for the four types, including the two-engine design. Roughly they may be classified as follows:

A-1, a cargo-passenger plane for short hauls, B-1, same type but larger, with larger range, C-1, range of 500 to 1,000 miles over difficult terrain and restricted over-water passage, D-1, range up to 2,000 miles for transcontinental and trans-ocean flying.

On each of these the committee's recommendations will cover cargo, port doors, passenger seating, maintenance, control, fuel systems, and hydraulic systems, ice protection, and other details. Each item is studied thoroughly. Cargo recommendations on the A-1, for instance, recently revised, consider not only general requirements but also general design of cargo compartments, flooring, side walls and doors in cargo areas, cargo handling, securing provisions, insulation, heating, ventilation and refrigeration, and lighting.

The A-1 plane, which would have a removable bulkhead, would load passengers, cargo or both, on short distances, operating presumably from small airports, yet giving service comparable to those as the carriers' principal routes. Seating capacity for 25 to 35 passengers with 1,000 to 2,000 pounds of cargo would be convertible to cargo facilities for at least 7,500 pounds. Crew would be two flight officers and a cabin attendant. Cruising speed at maximum gross weight and 5,000 ft altitude would be at least 235 m.p.h.

In its B-1 characteristics, the committee suggested a cruising speed at maximum gross and 10,000 feet altitude of at least 235 m.p.h. This plane would be designed to load passengers, cargo, or both at a normal operating range of 300 miles. Seating capacity would be 45 to 55 passengers with 2,000 pounds of cargo, with a convertible cabin to allow cargo to constitute all the payload. Crew would be two flight officers and two cabin attendants. Unlike the A-1, pressurization of the cabin and cockpit would be considered, although the committee did not agree as whether this was necessary.

The committee insists that as both these types, maximum operating efficiency be a prime consid-

eration, with least safety equivalent to that provided by low wing design and arrangement, whatever the new design. Landing gear for both would be of the nose wheel-tricycle type.

Work on these and the other plane types was interrupted so the committee might devote attention to the more imminent problems of conversion, not only of the planes being returned to the airlines currently by the Army, but of existing types that might become available in the more distant future.

In the group were the Douglas C-47 Skytrain, the Curtiss-Wright C-46 Commando, the Lockheed C-49 Constellation, and the Lockheed C-39 Lodestar. The discussions covered such items as windshields, propellers, heating, electrical and fuel systems, cargo doors, pilot seats, fuel protection, power plants, fuel tanks, wheels, tires and brakes, fuel venting and damp valves, cabin ventilation, and air conditioning.

NRC Body Discusses Air Pilot Training

Discussions and experiments in pilot training methods were discussed at the annual meeting of the National Research Council Committee on Selection and Training of Aircraft Pilot early this week in Washington.

Dr. Robert Y. Walker told members of an experiment at the University of Tennessee's Institute of Aviation Psychology where 28 civilians are receiving various types of flight training to determine the pattern which will produce the most skilled pilot.

System employed—CAA methods for standardizing pilot rating procedures by using machine recorders and motion picture cameras were explained to the Committee.

Preliminary findings of an accident case study board made by Dean R. Brinkell, CAA research director, and Dr. Raymond Frazer, CAA consultant, were presented by Frazer. Results of the study will be incorporated in pilot training procedures to help students recognize and avoid situations in which accidents may occur.

Dr. Morris Viteles of the University of Pennsylvania, chairman of the Committee, reported results of a questionnaire to flight instructors, seeking information on teaching instructors have found effective.



Washington's New ATC Terminal: on the new passenger-aproned west being constructed for international air traffic at Washington

Work goes ahead on the new passenger-aproned west being constructed for international air traffic at Washington

National Airport by the Air Transport Command. The terminal is expected to be ready for use late this summer

ATC Terminal to Be Ready Next Month

Expected to ease congestion of 60 to 70 flights now using National Airport daily.

The 60 to 70 Air Transport Command flights that use Washington National Airport as a landing or takeoff terminal each day will be using the new ATC International Terminal Building by the end of next month.

The Command looks to the new structure, rapidly pressing to completion, as a solution to a congestion problem that has harassed the Army air base at the port throughout its fast expansion.

Facilities inadequate—Not only have base facilities been scattered through various hangars, a hindrance to coordination, but actual terminal facilities have been inadequate and poorly located at an end hanger farthest from the airport's deluxe domestic terminal building. This has necessitated the building of important passengers at an out-of-the-way, unattractive and crowded facility.

Military security has been another worry, because of the proximity to contract carriers and airlines personnel of the present operations, which take place at an end of the field easily visible even to passing highway traffic.

Cost \$366,000—Contract for the new terminal, which is costing about \$366,000 calls for its completion Aug. 1, but ATC spokesmen say that, with the usual last-minute touches, it probably will be ready for use later in the month. The Command will use it for both domestic and international ATC flights. The proportions of each in the 1,600 and 3,200 flights a month was not disclosed. Seventy-one domestic airline flights are scheduled in and out of the airport each day.

After the war, when ATC is through with it, the terminal is to be taken over by Civil Aeronautics Administration. Just how it will fit into the airport setup when it is and commercially has not been determined. It may accommodate international travelers while the present terminal building is used for domestic passengers. Another possibility is that all incoming pas-

sengers will replace at the new building while outgoing will use the main terminal.

CAA Pays Half—CAA is paying \$250,000, or roughly half the cost of the new development. The money will pay for a 50,000 square yard concrete apron and improvement to Taxiway B, now a turf area, which will be graded and paved with asphalt. The concrete paving will be a 10-inch slab on a 18-inch gravel base.

The complete new development includes an sub-arrivals terminal building, which will contain all functions of passenger and baggage processing and servicing; the operations building, for pilot and flight administration and servicing; the mail building, where diplomatic pouches, government mail, soldiers' correspondence and other priority airmail will be handled; an air freight building for priority cargo, and the hangar and shops described in AVIATION NEWS Apr. 28.

Col Frank H. Collins heads the operation as commanding officer of the Washington National Airport Army Air Base, organized last spring as a separate ATC base.

West Virginia Aviation Problems Discussed at State Conference

Air-minded delegates from nearly 200 communities seek solution to difficult port situation in mountainous area in forum at capital city of Charleston

By DANIEL S. WENTZ II

Nearly 200 delegates from scattered West Virginia communities met recently in Charleston, one of the few state capitals without airline service, for the first annual West Virginia Aviation Forum. With Gov. Matthew M. Newby's keynote statement that "no other state needs aviation so much as West Virginia" in mind, the delegates heard representatives of various branches of the industry discuss various ways of fulfilling their needs.

Although enthusiasm in West Virginia is comparable to that in nearly all states, topography makes its problem unique. Its mountains have not proved barriers to air travel, but lack of level ground has delayed development of many necessary airports. Charleston, for example, All American Aviation, American Airlines, Eastern Air Lines and Pennsylvania-General Airlines are certificated to serve this large chemical center, but of the four, only All American is able to operate there because of its pick-up service. Other airline operations are reported awaiting construction of suitable airport facilities.

Port Theories Discussed—Several

speakers surveyed the airport problem in general terms, without specific reference to Charleston. Delegates heard the contrasting theories of airport construction—small vs. large.

Lois R. Inwood, executive assistant of Transcontinental & Western Air, advocated landing fields with 3,000- to 3,500-foot runways. To attain maximum safety, he would use as a yardstick a runway sufficiently long to permit a two-engine plane to complete an emergency take-off on one engine. Such a field, he said, would certainly be entirely safe for all types of private planes.

Urges Small Fields—In contrast with this view, John M. Hagan, airport project chairman, Federal Aeronautics Commission, American Chamber of Commerce, urged construction of numerous small, inexpensive landing fields. "Private planes are the whole hope of the industry," he said, pointing out that they will require numerous small airports, preferably new towns.

He warned that huge expenditures for a few elaborate airports might, meanwhile building many small ones.

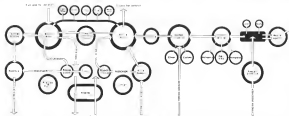
Similar landing facilities such as air parks or flight strips could be built as community projects, combining municipal buildings and recreation facilities with a landing area.

Financing Plans—Schemes of financing airports, applicable to projects both small and large, were discussed by John Groves of the Air Transport Association, and C. B. Donaldson of the Civil Aeronautics Administration. Donaldson announced a bill recently introduced by Rep. Jennings Randolph, West Virginia, which would establish a Federal-state-local government partnership for airport construction. Groves told of numerous ideas, developed during his experience as manager of the Washington National Airport, for making airports self-financing. He, too, urged that they be designed as centers of community interest.

Into a discussion of private flying, Leslie Neville, editor of *American magazine*, injected a note of caution, by pointing out that ownership of private planes will for some time to come be restricted entirely to the "two-car income group."

"Immediate selling of aircraft is a real need," he said, "if small planes are to be made available to many people."

Fight Training—W. L. "Jack" Nelson of the Civil Aeronautics Administration urged a continuing program of flight training to insure against future unpreparedness. He suggested colleges as the logical place for such training and said the high cost of learning to fly, which is the last barrier to wide-



International Terminal Flow Chart: The course international travelers will follow through the overseas terminal at Washington National Airport is shown in this "flow chart" by Air Transport Command.



Altogether Men Attend Forum: Among speakers at the West Virginia Aviation Forum, held in Charleston, W. Va., were (above, right photo, 2 to r.) E. J. Proddy of General Motors, Pittsburgh; Louis R. Inwood, executive assistant, TWA; E. J. Foley, assistant to vice-president, American Airlines; and M. Leithbridge of Eastern Air Lines. Groves R. H. Hagan, airport project chairman, Federal Aeronautics Commission, is seen at right. Speakers for the afternoon session covered such varied subjects as airport financing, private flying, and the work of the National Aeronautics Association. In the photo above the left, are (1 to r.) John Groves, Air Transport Association; W. L. "Jack" Nelson, Civil Aeronautics Administration; Rep. Jennings Randolph, forum chairman Leslie Neville, editor of *Aviation magazine*, and Lowell Sumner, manager of NAA. The geographic problems of Charleston and similarly-located cities were aired.

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CONTINENTAL'S FIRST MAIL RUN TEN YEARS OLD:

Continental Air Lines celebrates on July 25 the tenth anniversary of its first mail run. Picture shows Juan E. Mari, now on leave as an AAF major, being sworn in by Postmaster M. L. Surleson of El Paso before the first El Paso-Puerto flight July 25, 1934. The line started as Varney Speed Lines, became Varney Air Transport, Inc., a few months later, and in 1937 was

named Continental Air Lines, Inc. Other picture is that of Lt. Col. Robert F. Siz, who has returned to his duties as president of Continental Air Lines after serving nearly 20 months with the Army. Col. Siz was deputy base commander in the Air Transport Command at Morrison Field, west of Palo Alto, Calif.

DC-3 Averages 15.9 Hours a Day

Western Air Lines establishes high utilization made over two months' period in ATC personnel ferry to Alaska.

Western Air Lines' operation of a DC-3 with an average of 15.9 flying hours per day over a two months' period is a significant indicator of airplane utilization that may be reached in post-war commercial operations.

The Civil Aeronautics Administration's national average of domestic air line airplane utilization is 11 hours 30 minutes per day—"approximating national locomotive utilization," according to Charles I. Stanton, Civil Aeronautics Administration.

Personal Ferry—WAL's utilization, effected with C-47 Skytrains No. 1413 down for the Air Transport Command as a personnel ferry between Great Falls, Mont., and Fairbanks, Alaska, gave particular satisfaction in view of the trend of airplane manufacturing toward "bullet-proof maintenance" that is aimed at sharp reductions in the grounded time of airplanes for turn-around servicing

and periodic maintenance and the proportionate increase of a given airline's flight hours per month—the measure of earning power of the airplane.

In exceeding, during April and May, ATC's 15 hours per day utilization goal for the Alaska Wing, Western Air Lines gave added distinction by virtue of the fact that the C-47 military version of the DC-3 represents a period of aircraft design in which "easy maintenance" was not of prime consideration.

Pre-War Use—Pre-War Harbor domestic airline operations showed an average utilization of only 8 hours 10 minutes, and the jump to a national utilization average of 11 hours 30 minutes is believed by many airline maintenance and operations managers to be close to the maximum with DC-3 equipment.

L. D. Carlson, superintendent of WAL's military cargo division, credits the 18.9 hours utilization to "efficient maintenance and efficient scheduling."

A point to watch for in future aircraft design announcements of post-war airline designs will be the emphasis placed upon easy maintenance of new models and the streamlining in sales brochures of

minimum maintenance times that may be applied to the upkeep of each plane in the hands of well-trained ground and shop crews.

Uniform Airline Tax Law Studied

Delegates to NATA meeting at St. Paul ask formulation of measure.

State tax executives, spurred by the recent decision by the U. S. Supreme Court in the Northwest Airlines case, have started work on a uniform law, suitable for state adoption, covering airline taxation.

Delegates to a meeting of the National Association of Tax Administrators at St. Paul approved a resolution calling on the Association's president to appoint a committee to draft such a law. That federal law does not adequately cover the situation was evident in the opinions accompanying the decision in which the Court held that Ramsey County, Minn., could levy taxes on Northwest's entire fleet, based there, regardless of where the equipment was in use.

Gas Tax Opposed—The association heard a recommendation that the various states abstain from

Calling Dr. Jeep!...



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"Dr. Jeep" is one of the busiest fellows on the Rohr Production Line, wheeling up alongside of every motor nacelle and supercharger assembly for a new kind of final inspection. He makes the most thorough and accurate pre-flight check-up yet devised. * Rohr engineers developed several "Dr. Jeep" models, each for a specific task, to help Rohr Production Fighters maintain the efficiency of their skills, even while working at top speed. They are used to "check" Liberator and Constellation motor nacelle assemblies and complicated supercharger installations. * These mechanical braves work rapidly, accomplishing with confidence and certainty tasks formerly requiring thirty individual inspections with a variety of equipment. * "Dr. Jeep" is symbolic of developments in war plants throughout America, where engineers labor to give American bomber and fighter crews airplanes of maximum dependability and in great quantity. * Today we see "on the job to finish the job." After the war, this same American capacity to solve problems must be given a full opportunity to create the jobs that will win the peace we fight for.

Buy More Books...





A LEADING COSMETICS MANUFACTURER REPORTS:

"We cut down the size of our gift boxes and standard packages to effect an over-all saving of approximately 25% of the paper and cardboard, standardized our window displays and eliminated

all die-cuts, as well as scraps, shelves and secondary planes. We also folded all displays in half to save more than 50% of the paper and paperboard normally used."

A BIG PLATE GLASS COMPANY REPORTS:

"Our 1944 Color Book was reduced in size and quantity, resulting in a paper saving of 136,000 pounds. Our Color Cards, of which four or five million are used annually, were reduced in size at an approximate reduction of 50% in paper tonnage. We have diminished our Dealer Sales Portfolio. Our Color Book has become a 'self mailer,' eliminating need for envelopes."

ONE OF THE TOP LIFE INSURANCE COMPANIES REPORTS:

"In 1944 we will continue to specify lighter weights of paper wherever possible and take all possible steps further to reduce paper tonnage. We are instructing our field offices to scrutinize carefully all requests for printed material and to disapprove all requests for quantities that appear excessive."

A FAMOUS ADDING MACHINE COMPANY REPORTS:

"In advertising and promotion we are using about 30% of the amount of printing and paper used in 1941—that represents

about 2/3 saving. However, further savings will be effected whenever possible this year as well."

**Mr.
Manufacturer,
CAN YOU TOP THESE?**

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regardless to the A. N. A. Committee of Paper Saving.*



**Remember—
PAPER IS
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USE LESS—SAVE ALL WASTE PAPER!

This advertisement contributed by this publication and prepared by the War Advertising Council in cooperation with the War Production Board and the Office of War Information.



taxing aviation fuel if the federal government imposes such a tax in the future, but it was suggested that the federal government retire completely from the field of taxing gasoline or licensing motor vehicles, leaving these matters to state discretion.

This report was made by Robert S. Binkard, research director and spokesman for a joint committee on coordination of federal, state and local taxation, named by the national association. He said the report incorporated statements of the American Bar Association and the National Tax Association. Federal Function—Binkard said the committee assumed regulation of aviation is a federal function "and encroachment into this field by the states is another example of the duplication which burdens our whole tax structure." It also felt that revenue sources should be clearly defined and adhered to by the states and federal government. Minnesota voters will decide next fall on a state constitutional amendment to allow Minnesota to levy a tax on high octane gasoline for support of the State Aeronautics Department.

Aviation Heads Plan Fight on New Laws

Cost leaders to discuss defensive action in opposition to proposed excessive legislation.

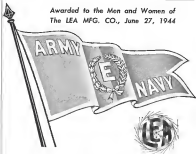
West Coast aviation leaders soon will be called into conference by the transportation committee of the Los Angeles Chamber of Commerce to consider aviation legislative proposals expected to appear in January sessions of the California State Legislature.

It will be a defensive conference—to forestall possible legislation that will be bad for aviation—rather than a meeting to suggest new state-wide aviation laws, says Glenn Ventburn, manager of the Chamber's transportation committee.

Eastman added that "we feel there should be a general satisfaction of aviation sentiment within the industry as seen in position with regard to legislative action on the aviation gas tax issue and the creation of aviation or airport organizations."

Ground Facilities Conference—The transportation chairman postponed to an indefinite date, possibly this fall, the Chamber's conference on aviation ground facilities.

Awarded to the Men and Women of
The LEA MFG. CO., June 27, 1944



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Recognition of an Industry

The Army and Navy "E" Award is a tribute to workers . . . a tribute to those who plan, design and produce . . . and rightly so! We here of Lea are deeply honored by the recognition accorded us by the two great Services. But in a sense, this award more than recompenses just our plant and our employees. It is recognition of the vital part Lea finishing operations and Lea competition play in the gigantic task of producing implements of war.

Yes, we at Lea are mighty proud of the "E" Peasant that will now grace our plant. But we are deeply conscious of the fact that it imposes a great responsibility. More keenly than ever do we all realize that the fruits of our efforts here are needed for the vast war production being carried on by American industry.

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10 days
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MATHEMATICS
for
AVIATION
MECHANICS

MATHEMATICS FOR

AVIATION ENGINE MECHANICS

By David Griffiths, *Aeronautics, Brunel University, Uxley-Bucks School of Aviation, Boreham, Essex*; formerly Lecturer at the Pennsylvania State School of Aeronautics, Harrisburg, Pennsylvania

This book gives you a sound working knowledge of the mathematics used in aircraft engine mechanics. It covers all the mathematics you need to know to be able to do the calculations you will be asked to do in the aircraft engine mechanics examination. It is written in a clear, concise, and easy-to-understand style. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics.

AIRCRAFT INSTRUMENTS

By George B. Jerns, *Professor, New York School of Aeronautics, Manhattan*

All who are in the air are concerned with aircraft instruments. This book is a complete guide to the instruments used in the aircraft. It covers all the instruments you need to know to be able to do the calculations you will be asked to do in the aircraft engine mechanics examination. It is written in a clear, concise, and easy-to-understand style. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics.

DAYBREAK FOR OUR CARRIER

By Louis Allen Miller, *USNavy*

This book is a complete guide to the instruments used in the aircraft. It covers all the instruments you need to know to be able to do the calculations you will be asked to do in the aircraft engine mechanics examination. It is written in a clear, concise, and easy-to-understand style. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics. It is written for the student who is studying for the examination in aircraft engine mechanics.

Mail This McGraw-Hill Caspary News

McGraw-Hill, Book Co., Inc.
212 W. 41 St., New York 36, N. Y.

I am interested in the book *Mathematics for Aircraft Engine Mechanics* by David Griffiths, *Aeronautics, Brunel University, Uxley-Bucks School of Aviation, Boreham, Essex*; formerly Lecturer at the Pennsylvania State School of Aeronautics, Harrisburg, Pennsylvania.

Send me ☐ 1 copy ☐ 2 copies ☐ 3 copies ☐ 4 copies ☐ 5 copies

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two originally set for July 27 and 28 in Los Angeles. The postponement is in anticipation that the Fourth Air Force needs may relax private flight restrictions in the Western combat zone and thus drive airport operators an improved view of their problems by the time the conference is called.

Ask AA Joplin Line Be Made Permanent

CAR examines proposed deal of TWA application for alternate routing of AM-3 between Amarillo and St. Louis.

Permanent service by American Airlines to Joplin, Mo., is favored by Civil Aeronautics Board Examiner Lawrence J. Keenan and Gordon M. Bell in their report on the Joplin-Tulsa-Oklahoma City case.

The report recommends that Transcontinental & Western Air's application for an alternate routing of AM-2 between Amarillo, Tex., and St. Louis, Mo., via Oklahoma City and Tulsa, Okla., and Joplin, Mo., be denied.

Temporary Orders — Joplin is now served by American and Mid-Continent under temporary exception orders. The permanent addition of Joplin to American's AM-30 requires the addition of only 6 more route miles. The TWA proposal would necessitate 696 new route miles.

American's traffic experience from Feb. 19 to May 31, 1954, supports Joplin provides three and one-half passengers per day. Mid-Continent's Joplin service on AM-30 between Kansas City and Tulsa averaged load factors of 72 percent between Joplin and Kansas City, and 51 percent between Joplin and Tulsa.

TWA Proposal — The route proposed by TWA would, if granted, duplicate 343 miles of American's AM-30 between St. Louis and Oklahoma City, and 323 miles of Braniff's AM-15 between Oklahoma City and Amarillo. The ex-

aminer found that such duplication would direct \$284,000 worth of business from American and \$50,000 from Braniff annually.

Counsel for Mid-Continent pointed out that granting TWA's proposal might let the foundation for a route between Kansas City or AM-2 and Tulsa on the alternate routing, which would parallel Mid-Continent's AM-26.

Braniff Objection — Braniff entered a similar objection based on

the possibility of connecting Oklahoma City with Wichita and Kansas City to compete with Braniff's AM-4.

In view of these competitive possibilities, and the fact that the necessity of interest of Joplin, Tulsa and Oklahoma City was shown to be with nearby points, the examiner found in favor of American's proposal.

UAL Charges TWA Violates Certificate

Civil Aeronautics Board's attention is directed to an alleged violation of Transcontinental and Western Air's certificate for AM 33 in a complaint filed by United Air Lines.

United asserts that TWA is circumventing local service restrictions on its Los Angeles-San Francisco operation by means of an unduly long layover at Los Angeles. The certificate restricts TWA from serving San Francisco except on flights originating at Albuquerque or East thereof.

Layover Period Cited — TWA's Flight 15, which originates at New York, arrives at Los Angeles at 2:15 P.M. It does not depart for San Francisco until 7:15 P.M. United contends that this 1 hour, 42 minute layover in effect makes the flight local service.

United asks that TWA's certificate be amended to require the further restriction of a 45-minute maximum layover period at Los Angeles.

The complaint filed by United, while not without precedent, is nevertheless unusual. In such cases, scheduling difficulties are usually caused out between the carriers involved.

Essair Stock

Essair, Inc., stockholders, confident that their intrastate operation in Texas will be successful, are holding options on future Essair stock issues.

Treasury Shares — Of 1,000 shares, six par, \$5 each are remaining in the company treasury for the time being. The other 3,000 are held by May S. W. Marshall, Jr., C. W. Marchand, W. F. Long, L. H. Luckey and E. Y. Hall of Dallas, 4,000, part or all may be issued later.

Major Marshall, who is on active duty overseas, is a nephew of R. C. Marshall, Jr., whom he preceded as president of the company.

Air Caterer Grows

Hall-Dobbs, already serving food for 11 airlines, expands to 10th airport restaurant.

Increasing importance of food as a factor in airline operation has been emphasized with announcement by J. K. Dobbs, president of Hall-Dobbs Enterprises, Inc., of Memphis, Tenn., that his company,



J. K. Dobbs

which claims to be the largest independent caterer for air travelers, is expanding its facilities.

Already the company prepares meals for 11 airlines operating in North America, and operates airport restaurants at nine cities. It will spend more than \$50,000 for improvements at the Love Field, Dallas, airport restaurant, which it has purchased.

Dobbs and his associate, Hersey Hall, operate 6 establishments in a score of American cities.

Airlines served are American, Braniff, Chicago and Southern, Continental, Delta, Eastern, National, Northwest, Pan American, TWA, and TWA's airport restaurants are at Dallas, Amarillo,

Miles Authorized

Authorized route mileage of the domestic airlines at the beginning of July were as follows: All American Aviation, 1,320; American, 8,587; Braniff, 3,465; Chicago and Southern, 1,456; Colonial, 393; Continental, 2,277; Delta, 1,874; Eastern, 7,083; Eastern, 307; Island, 1,331; Mid-Continent, 1,902; National, 2,332; Northwest, 809; Northwest, 3,119; Pennsylvania-Continental, 3,132; TWA, 6,854; United, 5,856; Western, 1,215.

Through topographical error, these were not included in last week's Aviation News story on the correct operations (p. 30). They are the "fatter net of Agair" referred to in the fifth paragraph.

Birmingham, Chicago, Jackson (Miss.), Memphis, New Orleans, Atlanta and Wichita.

147 So. Americans In CAA Air School

Looking toward an eventual uniform system of survey facilities linking both continents of the Western Hemisphere, the Civil Aeronautics Administration has begun its third program for aviation training for young men from Latin-American republics with 147 students in training at three Mid-Western cities.

Purdue Aeronautical Corp., West Lafayette, Ind., is giving a year's training to 35 prospective pilots. Sixty-six mechanics are enrolled at Spartan School of Aeronautics, Tulsa.

CAAA Regional Headquarters at Kansas City is training 56 communications and air traffic control technicians.

**VICTORY
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HEADLINES
WITH
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Feddern's unusual contribution of long hose transfer experience, plus ultra-modern research and testing facilities, plus specialized manual working skills, is helping "to save the day" for America's largest aircraft manufacturers.

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DIVISION,
BUFFALO 7, N. Y.**

SHORTLISTS

• **Mod of Jet** now complete by United Air Lines of 1,000 scheduled flights for the Air Transport Commission over Alaskan terrain without serious incident of injury to personnel.

• **Trans-Canada Air Lines** has added a new service from Toronto via Montreal, Fredericton, N.B. to Halifax and Sydney, N.S.

• **Can. Medicare** via Aviation, Pan American affiliate in Mexico, is to build at Mexico City airport what is said to be the first complete airplane engine overhaul shop in Mexico. CMA's machine turning will be expanded to provide men.

• **National Airlines**, anticipating service between Florida and New York early in the fall, has taken over counter space at La Guardia Field, New York.

• **Western Air Lines** latest schedule refers to the "Inland Air Lines Division." CAB approved Western's part of control of inland last May and the latter's routes are now part of Western's system.

• **Parliament of West Texas Airlines** is a pro-life, free-trade group has been announced by Leon W. Schwartz of San Antonio, president. The company proposed to connect Austin, Fort Worth, Dallas and El Paso served by larger air airports.

• **The War Department** has authorized...

used \$2,900,000 for B-15 and extension of two landing strips at San Francisco Municipal Airport as part of \$10,000,000 to be spent by the Army and Navy on improvements at MIA. The Navy has agreed to the MIA. The Navy has agreed to the MIA. The Navy has agreed to the MIA.

CAB ACTION

• **A supplementary** air traffic agreement between the U.S. and Canada... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

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• **A supplementary** air traffic agreement between the U.S. and Canada... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

into between Dec. 1, 1955, and Dec. 30, 1956. It will be... It will be... It will be... It will be...

• **Recent** action has led for approval of... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

• **A recent** provision in the West Coast... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

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• **A recent** provision in the West Coast... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

CAB SCHEDULE

July 10, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 11, **Positive** action... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 12, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 13, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 14, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 15, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 16, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 17, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 18, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 19, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 20, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 21, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

July 22, **Deadline** for... The U.S. and Canada... The U.S. and Canada... The U.S. and Canada...

To White House

The Civil Aeronautics Board has forwarded to the President copies of all applications in the Hawaiian case (Docket 881 et al.) Applicants for routes between the West Coast and Hawaii include Matson Navigation Co., Hawaiian Airlines, Ltd., Transoceanic Lines, United Air Lines, Western Air Lines, and the Ryan School of Aeronautics.

The Civil Aeronautics Act requires that all applications for foreign or overseas routes be transmitted to the President prior to hearing. However, as well as the decision after the hearings, similar procedure will be followed for applications in the transoceanic foreign route cases recently submitted by the CAB.

The airlines are opposing a U.S. Chamber of Commerce proposal that operators of new forms of aircraft be allowed to operate other forms and encouraged to coordinate their services through contractual arrangements.

A letter from C. Edgar S. Gorman, president of the Air Transport Association, has been sent to each Chamber member, to whom the proposition was submitted in referendum, urging a vote against it and explaining the airlines' opposition to any policy of transportation integration between different types of carriers.

Multiple Tax Bill
President Roosevelt has signed a bill directing the Civil Aeronautics Board to consult with state authorities with a view to elimination of multiple taxation of persons engaged in air commerce. The Board has six months in which to report the result to Congress.

The legislation was introduced by Rep. Alfred L. Bulwinkle of North Carolina after the Supreme Court decision in the Northwest Airlines case.

The PHOTOS:
U.S. Super Gears... U.S. Army Air Force... U.S. Navy... Pan American Airways... British Glided Plane... Wright Aeronautical Corp... Continental Air Lines

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Committee Goes to Work

THE PLAN of JUAN TRUPE and the handful of Senators he has rallied to his aid—formation of a chosen instrument for post-war United States international air commerce—has been dealt another crushing blow, this time by the 18 airlines comprising the Airlines Committee for U. S. Air Policy. The White House approval of CAP's series of hearings on international routes, under the present law which calls for competition, was the first setback.

After almost a year of virtual inactivity in which it was constantly on the defensive, this committee went into action during the final hours before Congress recessed for the Republican convention, and persuaded journalists of a resolution by the Aviation Subcommittee of the Senate Commerce Committee which would have advocated a chosen instrument.

The resolution would have been framed and sponsored in such a way that the appearance of both Democratic and Republican approval of Tripp's proposal would have been given.

Its defeat, brought about by a commendable demonstration of power and unity by the airlines, has multi-fold significance.

It means that members of the Senate aviation group have had their eyes opened to the fact that there is much to be said against the chosen instrument.

It probably marks the first of a projected series of actions by a rejuvenated Airlines Committee which plans to dispose once and for all of the idea that one company can handle the United States' airline business ahead.

It means, too, we may hope, that the Senate committee appointed to study aviation no longer will treat its subject with a lack of interest which totally ignores the immense importance of proper legislative attention to one of the country's major problems.

To do just to public hearings have been held by the committee. Advancement in the executive sessions has been dismally, with the exception of those members who have been sold on the chosen instrument.

That was the situation until the last few meetings before the recess. Becoming alarmed by both the availing indifference of the Airlines Committee and the progress being made by supporters of the chosen instrument among aviation executives, a small group of airline executives, acting independently, took matters into their own hands.

But the balance still lay with the chosen instrument.

Constructive Moves

A^N EDITORIAL IN ANTI-TRUST NEWS, June 5, asserted that the new Civil Air Patrol League, to satisfy aviation's public, should give a fuller report of the reasons for its formation, its mechanism of operation, and its purposes. On June 26-27 League officers met with the 48 wing commanders of Civil Air Patrol and recommended (1) that a new statement of policy will be drawn, declaring the primary aim to be help the CAP meet purposes; (2) that CAP wing commanders, accredited in various regions, will for the first time be members of the League board and executive committee;

ment adherents. Then, with a recess agreement, Senator Owen Brewster, who is pulling hard for the chosen instrument, flew to South Carolina to consult Senator Joseph Bailey, chairman of the Commerce Committee, about a proposed resolution. Aviation Subcommittee Chairman Bennett Champ Clark, according to report, had left aviation matters in Brewster's hands, while the former campaigned in Missouri. It is unquestionable that the objective was to formulate a resolution on policy which would call for a merger of external air service.

Brewster barely had left Washington when aviation committee's phones began to ring, protests from every sector of the country.

Bailey, an admirer of Tripp, nevertheless did not assent to the plan presented to him. Clark rushed back to Washington, and on the day of the recess a committee meeting was held. This meeting was supposed to urge the resolution.

Instead, according to reports of members, it decided on the more formal writing of a letter to the President, with carbon copies to the State Department and Civil Aeronautics Board. Chosen instrument advocates made the most of this intended letter by saying it would contain an acknowledgment that the executive agencies should do nothing about air policy that might later be undone by legislative action. But the main project had been stymied, and the airlines can have the credit.

A rift developed within the aviation subcommittee. Although the chosen instrument was not definitely scrapped, as far as the Senate group was concerned, at least some members who had taken little interest in what was going on awakened to the fact that certain interests were running away with the show. That was stopped.

The Airlines Committee meets in Washington this week and may elect a permanent attorney to be its counsel and to head up its work. The executive committee at the same time, according to plans late last week, will be given increased representation from among the smaller airlines.

Election of a counsel from outside the industry will give competing direction to the committee, simultaneously avoiding necessity of placing any single airline executive in charge of a committee of 17 airlines at a time when his own line is being heard by the CAB on a foreign route application.

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